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SHAH JAHAN'S FORT, DELHI.

OF all the Mughal monuments of Delhi which are now invested with so much interest owing to the city having become once more the Capital of the Indian Empire, the Fort of *Shāh Jahān* will, to the majority, appeal the most. The home of the descendants of Timur from the date of its building down to the day when it was taken from the last titular Emperor of Delhi by the British in 1857, it has been the stage of some of the most stirring dramas in Indian history, and as such is invested with a veritable halo of romance. In this article an attempt is made to throw some additional light on its history from evidence—unpublished, it is believed, hitherto—which has been culled from Indian historians by my Assistant Maulvi, Muhammad Shuaib, and to show, also, what has been done in the last decade by the Archæological Department to make the condition of the Fort worthy of its former glories. Since 1903 several articles¹ have appeared in this Annual on the work that has been going on in the Fort, but, until it was finally worked out, a concise description of the complete scheme of conservation could not be given.²

¹ Previous references in the *Archæological Survey of India Annual* to Archæological Work in Delhi Fort.

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„ 1903-04.—Repair work at the Moti Masjid p. 5.—Naqqā *Khāna*, Rang Mahal and *Shāh Burj* pavilion reclaimed from the Military and waiting repair, discovery of marble tanks, cascades and fountains in the Sawan and Bhadon pavilions and the *Shāh Burj*, pp. 6, 21, 22. Trial diggings at the Hayāt *Bakhsh* garden and work on the restoration of the Elephant statues, p. 22.

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² Besides the Editor of this Report, I am indebted also to Dr. Horowitz for examining the Persian quotations and their translations, and to Dr. Vogel, Mr. J. P. Thompson, Mr. Ward and Prof. Arnold for information supplied.

Transference
of Capital from
Agra to Delhi.

Officers in
charge of
Building.
Site near
Salimgarh
chosen.

It is said that Shāh Jahān wished to transfer the Capital to Delhi from Agra on account of "the broken ravines and numerous inequalities throughout the city, want of space in the Fort, narrowness of the streets and the inconvenience caused to the inhabitants by the large crowds of troops and elephants, the retinues of the Emperor and his Amirs."¹

The order was accordingly issued for engineers to prepare designs for a palace similar to those of Agra and Lahore² and the foundation stones were laid in A. H. 1048, (A.D. 1638), under the superintendence of Ghairat Khān,³ the Governor of Delhi.

Alah Vardī Khān, succeeded him as 'superintendent of works,' and he in turn was followed by Makrumat Khān,⁵ who completed the palace in 1647 A.D.⁶ Other names associated with the building of the Fort are Aḥmad and Ḥamīd,⁷ able 'master'-builders of the day, while the Emperor himself when inspecting the buildings gave orders for certain alterations.⁸

A site having been chosen in the suburb of the Capital, near Nūrgarh,⁹ building operations began, under the superintendence of Ghairat Khān, "when five hours had passed from the night of Friday, the 25th of Zu-l-Hijjah, corresponding with the 9th of Urđi Bahisht, in the 12th year of the divine reign, corresponding to A.H. 1048, at a happy time and auspicious moment."

The "skilled architects" Aḥmad and Ḥamīd marked out the ground according to the plan, and "the spade men began to dig." "On the 9th Muharram, A.H. 1049, corresponding with the 23rd Urđi Bahisht, when, from the night of Friday, five hours and twelve astronomical minutes had passed, the foundations of these new buildings were laid....." Skilled artisans, the historian goes on to say, were summoned for the work from all quarters of the Empire.¹⁰ The progress made under the various governors is also recorded. Under Ghairat Khān, in four months and

¹ *Amal-i-Šālih*, fol. 575-6 ; see also Muḥammad Zakaullah, *Zafar Nāmāh-i-Šāhjahān*, Vol. VII, pp. 399-400. Delhi 1897.

² *Ibid.*

³ Sayyid Aḥmad Khān writes 'Izzat Khān instead of Ghairat Khān (*Athar-u-Š-Sanādīd*, Cawnpore 1904, pp. 28-29) ; also Carr Stephen, *Archæology of Delhi*, p. 216. No doubt 'Izzat Khān was also one of the noble- of Shah Jahan's court, but Ghairat Khān became Governor of Delhi in the 10th year of the accession, and was entrusted two years later with the charge of the new buildings. He died at Thaṭh in A. D. 1640 where he had been appointed Governor.

(See *Maāthīru-l-Umarā*, Bibl. Ind., Vol. II, pp. 863-5.)

⁴ A member of the Saljukian family and descended from King Sanjar. A courtier of Jahāngir's. In Shāh Jahān's reign he held various high posts. His *ḥammām* still exist at Agra. Refer *Maāthīru-l-Umarā*, Bibl. Ind., Vol. I, pp. 207-15 and Manucci, *Storia do Mogor*, Irvine's translation, Vol. I, pp. 329-32.

⁵ His name was Mulla Murshid Shirazi. He spent many years of his life with Mahābat Khān, the Commander-in-Chief, and later entered the services of Jahāngir. In the first year of Shāh Jahān's accession he was honoured with the title of Mukramat Khān, and was appointed 'Superintendent of the registration office for the effects of deceased persons'. In the 8th year, the Emperor sent him as ambassador to the court of Ādil Shāh of Bījāpūr and in the beginning of the 11th year he was appointed Governor of Delhi, where he died in A. H. 1059 (A. D. 1649) (see *Maāthīru-l-Umarā*, Vol. III, pp. 460-69.)

⁶ *Badshāh Nāmāh*, Vol. II, p. 320.

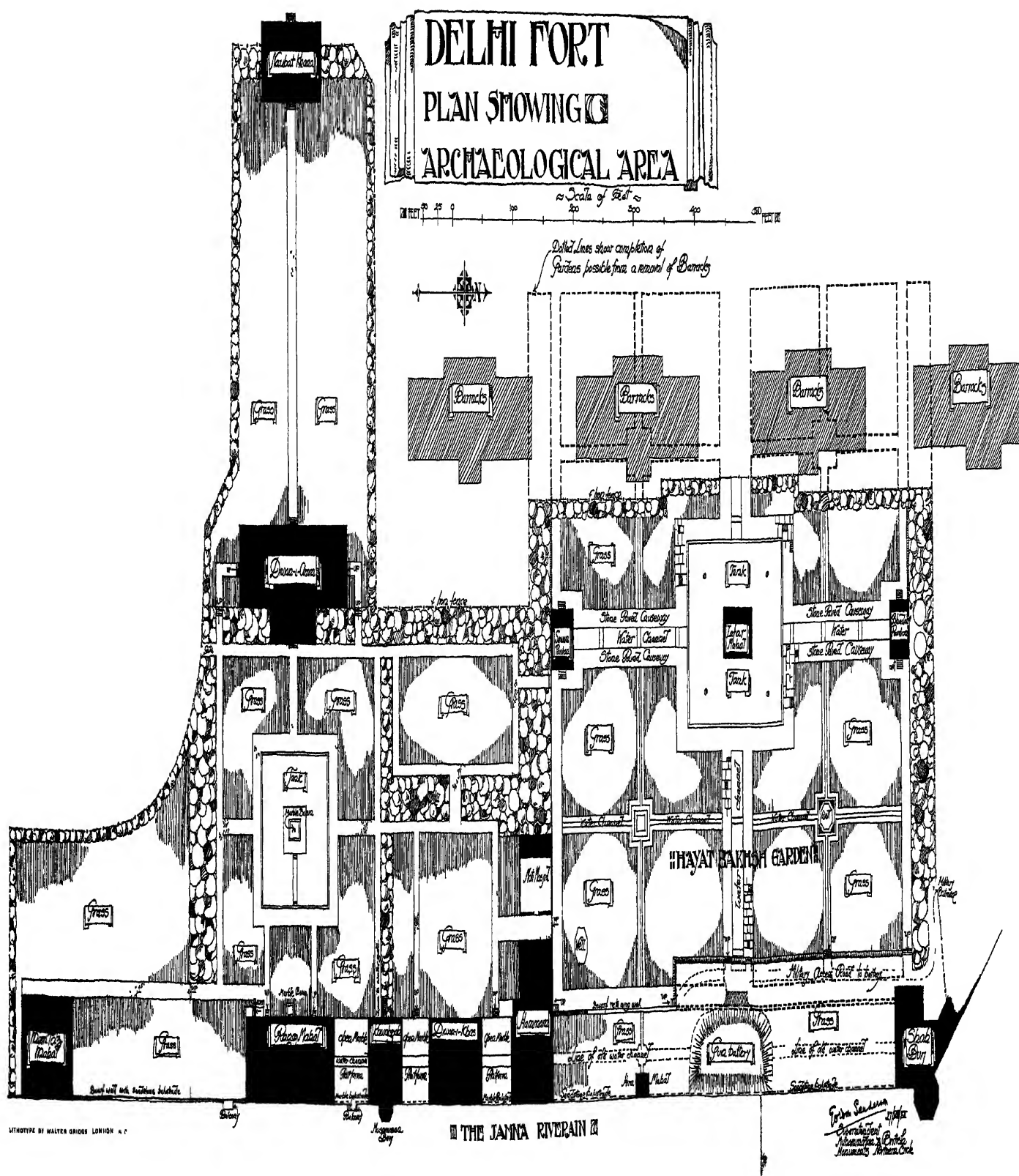
⁷ I am informed by Mr. J. P. Thompson that his name is commemorated in the Kucha Usta Ḥamīd near the Jami Masjid, Delhi.

⁸ *Op. cit.*

⁹ Nūrgarh-Salimgarh. Named Nūrgarh after the Emperor Nūr-u-dīn Jahāngir, who built the bridge which connected the island (as it was then), with the mainland on which Shāh Jahān's palace stands. The marble inscription formerly on this bridge dated A.H. 1031 (1621 A. D.) is in the Delhi Museum.

¹⁰ *Amal-i-Šālih*, fol. 576 ; also see *Maāthīru-l-Umarā*, Bibl. Ind., Vol. II, pp. 863-5 and Vol. III, pp. 463-4.

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two days all excavations were made, materials collected and certain foundations laid. After the latter's appointment as Governor at Thath, Alah Vardī Khān took over charge, and the walls of the Fort on the river side were raised to 12 *gaz*, while in the 20th year of the reign the buildings were completed under Mukramat Khān.¹

The historians differ as to where Shāh Jahān was when the news reached him of the completion of the palace buildings. Muhamad Sālih writes that after consulting the astrologers the 24th Rabiū-l-awwal, corresponding with the 20th of Farwardin, A. H. 1058, was selected as the auspicious date for the visit of the King, and that he marched towards Shāhjahānābād, as the new city was named, on the 12th Rabiū-l-awwal.² An historian of the reign of Aurangzeb has it that the Emperor, "having given over command of the Fort at Akbarābād (Agra) to Bāqī Khān, set out by way of the river for Shāhjahānābād, which he named *Daru-l-Khalifat* (seat of government). on the 12th Rabiū-l-awwal, and arrived at the Fort on the 22nd of the same month.³ The same historian says elsewhere that the Fort was completed in the 20th year of the reign, when His Majesty was in Kābul, and that he arrived in the Fort on the 24th Rabiū-l-awwal, A. H. 1058. The accounts are rather conflicting for Shāh Jahān could not have reached Delhi in twelve days from Kābul, and it is far more probable that he came from Agra by river. However, the historians seem agreed that he entered his new city on the 24th Rabiū-l-awwal A. H. 1058. Muhammad Sālih says fifty *lacs* was the cost of building the Fort, and that about the same amount was spent on the buildings within it. "It has," he goes on to say, "four gates, two wickets, and twenty-one bastions, seven of which are round and fourteen octagonal. The Fort is octagonal in shape, 1,000 *gaz* long, 800 broad and 25 *gaz* in height from ground level."⁴

The area is 600,000 sq. *gaz*. and the circumference 3,300 *gaz*. The wall and towers, from pinnacle to foundation, have been built of pure red sandstone.⁵ "Red sandstone and marble for the construction were provided by the governors and rajahs of the localities where these materials were obtainable and the former was also brought from Fathpūr Sikri,⁶ while a large basin made of one piece of marble was brought from Makrāna in Rajputana."⁷

Bakhtāwar Khān, writing in the reign of Aurangzeb, also gives the cost of the various buildings as follows:—

Fort and buildings within it	. . . . .	60	<i>lacs</i> of rupees
Royal Mansions . . . . .	. . . . .	28	„ „
<u>Shāh Maḥal</u> (Diwan-i- <u>khāss</u>) including silver ceiling and fittings . . . . .	. . . . .	14	„ „
Imtiyāz Maḥal (Rang Maḥal), with bed chamber and surroundings . . . . .	. . . . .	5	<i>lacs</i> and 50,000 rupees.
Daulat <u>Khāna-khass-o-Āmm</u> (Diwān-i-Āmm) . . . . .	. . . . .	2	<i>lacs</i> of rupees.
Hayāt Bakhsh garden, with the Hammām . . . . .	. . . . .	6	„ „

¹ Op. cit. fol. 576; also see *Maāthīru-l-Umarā*, Vol. III, pp. 462-3.

² *Amal-i-Sālih*, fol. 576; also see *Maāthīru-l-Umarā*, Vol. III, pp. 462-63.

³ Khwaḥ Khān *Muntakhabu-l-Lubāb*, Bibl. Ind. pp. 680-1.

⁴ Actual Measurements are 3100' 0" North and South by 1650' 0" East and West.

⁵ *Amal-i-Sālih*, fol. 578. Refer Mauucci, *Storia do Mogor*, Vol. I, p. 184. and *Tavernier*. Vol. I, p. 97.

⁶ *Maāthīru-l-Umarā*, Vol. III, p. 464.

⁷ *Amal-i-Sālih*, fol. 582.

The palaces of the Begam ¹ Šāhib and other begams and royal ladies	7	lacs of rupees.
Bāzārs and squares for Imperial workshops	4	„ „
The Fort and its moat ²	21	„ „

Workmen's wages amounted to one *crore* (ten million) rupees.

Gardens round the Fort.

Gardens were laid out round the Fort³ which was surrounded by a masonry-lined moat 25 *gaz* broad and 10 *gaz* deep, always kept filled with water.⁴

Stone bridges at Lahore and Delhi gates.

The two stone bridges, which cross the moat at the Lahore and Delhi gates, were built, their inscriptions tell us, in A. H. 1226 (A. D. 1811) in the reign of Akbar II, under the management of Dilāwaru-d-Daulah, Robert Machpherson⁵ Bahādur Diler Jang, to replace the former drawbridges of wood.⁶

The Barbicans.

The barbicans in front of the Delhi and Lahore gates are the work of Aurangzeb. Shāh Jahān, imprisoned by his son at Agra, wrote to him, "Dear son, you have made the Fort a bride and have set a veil before her face."⁷ The glacis which surrounds the Fort to the south and west was constructed after the Mutiny.

Old plan of Fort.

The old plan of the Fort (Plate II) has not, it is believed, been published hitherto. It differs slightly from the plans given by Carr Stephen (*Archæology of Delhi*, p. VI, introduction), by Fanshawe (*Delhi Past and Present*, p. 23) and by Fergusson (*Indian and Eastern Architecture*, Vol. II, p. 310). Its measurements are, unfortunately, not to be relied on and it must be regarded merely as a sketch of the buildings as they existed before the advent of the British. The parterres of the Hayāt Bakhsh garden are also incorrectly shown, but the detail of the northern and southern portions of the Fort is carefully indicated and gives a good idea of the numerous subsidiary buildings that clustered round the royal apartments.

The Mughal lay-out can be seen at a glance. The Diwān-i-‘Āmm and its courtyard is the main central feature, and from the lesser courtyard in front of the Naqqār Khāna branch out the two main arteries running North and South, from which, in their turn, led the lesser alleys leading to the humbler quarters of the palace.

The inauguration of Fort by Shah Jahan.

The contemporary historian gives Saturday the 24th Rabīu-l-awwal of the 21st year of the accession A. H. 1058, as having been fixed as the auspicious day for the inauguration of the new palace.⁸ The Emperor arrived at the Fort with a gorgeous retinue, Prince Dārā Shikoh scattering gold and silver over his father's head till he reached the gates.⁹ The Palaces had been already decorated, courtyards and buildings covered with gorgeous carpets and hangings, while "deep red Kashmir shawls covered each seat." "The buildings became the envy of the art galleries of

¹ The title of Jahānāra, the eldest daughter of Shāh Jahān.

² Bakhshawar Khān, *Murat-i-‘Ālam*. Ms. in possession of Maulvi Mahmud-ul-Husain Khān of Tonk, fol. 350.

³ *Amal-i-Šālih*, fol. 585.

⁴ *Bernier's Travels*, transl. by A. Constable, 1891, p. 243, and *Āthār-u-š-Sanādīd*, Cawnpore 1904, Chap. II, p. 29.

⁵ Belonged, in 1811, to the 17th N. I.; entered the E. I Co.'s service as a cadet in 1794; became Lieutenant, 25th April 1797; Captain, 27th Feb. 1805; Major, 22nd Jan. 1817; died at Delhi, Jan. 6, 1828. Son of Andrew Macpherson and born in 1774 in the Parish of Thingupie, Invernesshire, N. B.

⁶ *Āthār-u-š-Sanādīd*, Cawnpore 1904, Chap. II, p. 30.

⁷ *Āthār-u-š-Sanādīd*, Lucknow 1876, Chap. II, p. 6.

⁸ *‘Amal-i-Šālih*, Fols. 590-99.

⁹ A usual custom for Muhammadan Kings of India when entering the Capital. Jahāngīr refers to a somewhat similar occasion in his memoirs. *Tuzūk-i-Jahāngīrī*. Rogers and Beveridge, p. 259.

China''. The roof, walls, and colonnades (*aiwāns*) of the Diwān-i-Āmm, were hung with brocaded velvet from Turkey, silk from China and *Khatā*,¹ while a gorgeous canopy (*Aspak Dalbādal*) specially prepared for the occasion in the factory at Amadābād, measuring 70 *gaz* by 15 *gaz*, and costing a *lac* of rupees, was raised by '3,000 active *farashes*'.² The canopy was supported by silver columns and surrounded by a silver railing. The hall of the Diwān-i-Āmm was surrounded on this occasion with a golden railing, while the throne was provided with a special canopy, fringed with pearls, and supported by golden pillars, wreathed with bands of studded gems. Small subsidiary thrones, set with gems, were also placed before the royal throne. The Emperor, signalised the occasion, still further, by the distribution of lavish gifts, and the 'honours list' was a full one. The Begam Sāhibah received 4 *lacs* of rupees; Prince Dārā, a special robe of honour and jewelled weapons,³ an increase from the rank of ten to twenty thousand horse, a caparisoned elephant, and two *lacs* of rupees. The Princes Sulaimān Shikoh and Sipehr Shikoh⁴ received, respectively, daily allowances of Rupees 500 and Rupees 300 in addition to their original pay. The Prime Minister, Sa'dullah Khān, a robe of honour, a *nādrī*, and the rank of 7,000 horse, while Raja Bithal Das⁵ was presented with a robe and the rank of 5,000 foot and 4,000 horse.

Makrumat Khān, under whose supervision the Fort and its buildings were completed, received the rank of *Panj Hazārī*. The above is a brief abstract of Muhammad Sālih's account of the inauguration ceremony, and the palace is said to have been somewhat similarly decorated on the occasion of Aurangzeb's accession.

But the hey-day of the Fort's prosperity had passed, and we must now refer to that series of calamities, the death throes of the Mughal Empire, in which the buildings of the Fort played but too prominent a part. Denuded as they are of their former splendour, they but too eloquently bear witness to the wounds received during the successive inroads which eventually brought about the complete downfall of the Empire. Mention must also be made of an earthquake which occurred in 1719, and which is said to have damaged the Fort walls as well as the buildings of the city.⁷

After the reign of Aurangzeb the fortunes of the Mughals steadily declined, until, in 1739, Nādir Shāh entered Delhi and occupied the main apartments of the palace, the Emperor Muhammad Shāh retiring to the Shāh Burj.⁸ The enormous ransom demanded by the invader must have involved the removal, besides the famous Peacock Throne, of many of the treasures the palace contained. The Mughal Empire was, indeed, in dire straits. Internal disorder was rife; the Durrāni invaders, already hammering at the gates of the Capital, were with difficulty bought off by the cession of the provinces of Lahore and Multān, and in 1754 the Empire had been reduced to the few districts round Delhi. Taking advantage of the chaos, the Marāthās and Jāts

¹ *Khatā*. Northern China.

² *Amal-i-Sālih*, fols. 590-95.

³ The text has *nādrī*, *jamdhar* and *Phul Kaṭārā*.

⁴ Sons of Dārā Shikoh, imprisoned by Aurangzeb in Gwalior Fort, where they both died.

⁵ Son of Gopāl Dās, Raja of Sheopur.

⁶ *Ālamgīr Nāmāh*. Bibl. Ind., pp. 351-382.

⁷ Muhammad 'Alī Khān *Anqārī*, *Tārīkh-i-Muzaffarī*. Ms. in the Government Library, Allahabad, fols. 115-116

⁸ Hearn. *Seven cities of Delhi*, p. 324.

took Delhi. The Fort was bombarded from the '*raiti*'¹ side by three guns, worked by Europeans, which rained shot on the Āsad Burj, the Musamman Burj and other palaces. The Diwān-i-Khāṣṣ, Rang Maḥal and Mōti Maḥal and Shāh Burj were severely damaged, but the Fort itself, "on account of its great strength, remained undamaged".² They then proceeded to denude the palace of what had been left by Nādir Shāh and Ahmad Khān Abdālī,³ removed the silver ceiling of the Diwān-i-Khāṣṣ and robbed the marble walls of their precious stones, before they were overthrown at Panipat in 1761. Nearly thirty years afterwards Shāh 'Ālam was blinded and deposed by the Rohilla brigand, Ghulām Qādir Khān, who was enraged at the Emperor's denial of the existence of buried treasure, in the fruitless search for which much damage was probably done to the buildings. The Rohillas were again evicted by the Marāthās, who allowed the re-enthroned Shāh 'Ālam a yearly income. Before leaving the Fort, Ghulām Qādir blew up a powder magazine, but the Marāthās were able to extinguish the conflagration before much damage had been done.⁴

The East India Company now appears on the scene, and after the battle of Delhi near Humāyūn's tomb, in 1803, the Marāthās were driven off and Colonel, afterwards Sir David, Ochterlony, was appointed resident. Another Marāthā force under Jaswant Rao Holkar returned a year later and Delhi underwent another siege, but was successfully defended by Ochterlony. During this bombardment the palace buildings suffered considerable damage. The Āsad Burj was repaired later at the expense of Akbar II,⁵ whose jurisdiction was now confined to the precincts of the Fort.⁶

Neglected
condition of the
Fort in 1826.

Bishop Heber writing in 1826, gives a graphic description of the neglected condition of the Fort,⁷ and states how the inlay stones had been picked out from the marble with which the buildings were lined.

The Shāh Burj, he says, was "dirty, lonely and wretched, and full of lumber and gardener's sweepings," while the Mōti Masjid was in the same state of neglect, "with peepuls springing from its walls, the exterior gilding partially torn from its dome, and some of its doors coarsely blocked up with unplastered bricks and mortar." "The Diwān-i-'Āmm was full of lumber of all descriptions, broken palanquins and empty boxes, and the throne so covered with pigeon's dung that its ornaments were hardly discernible." The unhappy condition of the apartments of the royal ladies is but too vividly described in the '*Wanderings of a Pilgrim*,' the writer of which visited Delhi in February, 1838. An extract from it is given hereafter in the description of the Rang Maḥal. The writer states that the allowance of one of the princes was, at this time, but twelve rupees a month!

Things were no better in 1857. Old photographs taken at that date show the ruined dome of the Muṣammam Burj, untidy chicks hanging from its windows and

¹ *Raiti*. Literally a 'sandy place'; here referring to the sandy foreshore between the river and the Fort.

² Ghulām Ali Bilgrāmī, *Khazarah-i-'Āmirah*. Cawnpore 1900, p. 104.

³ Hearn, *Seven cities of Delhi*, p. 243.

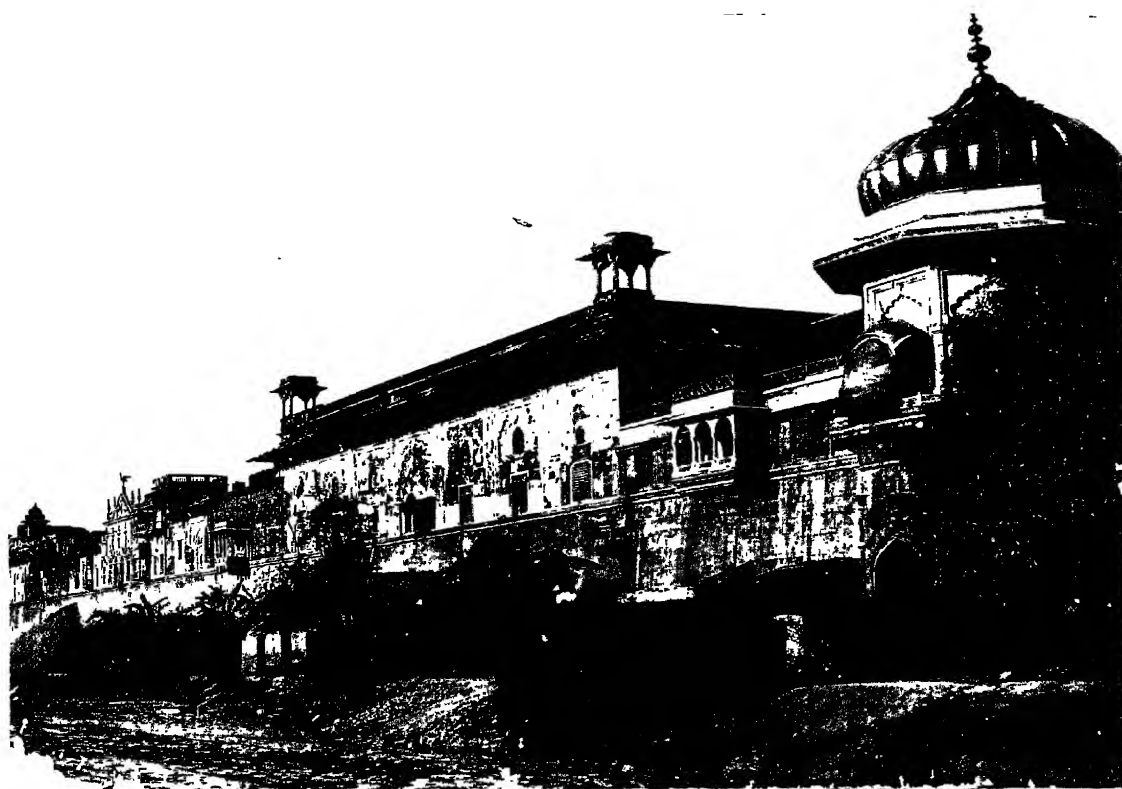
⁴ Hearn, *Seven cities of Delhi*, p. 250-1.

⁵ Carr Stephen, *Archæology of Delhi*, p. 237.

⁶ J. P. Thompson, *Catalogue of Antiquities*. Coronation Durbar Loan Exhibition, p. 105. Baptist Mission Press, Calcutta 1911.

⁷ *Heber's Journal*. Vol. II pp. 302-305.

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(Fig. 1.) AN OLD PHOTOGRAPH (MUTINY PERIOD) SHOWING THE BUILDINGS ON THE EAST FRONT OF FORT, STRETCHING SOUTHWARDS FROM MUSAMMAN BURJ.



(Fig. 2.) HAYAT BAKSH GARDEN. GENERAL VIEW FROM SOUTH, SHOWING EXCAVATED CENTRAL TANK.

those of the Rang Mahal, while to the south of the latter lay a cluster of ramshackle structures erected in the debased style of architecture which became prevalent with the growth of European fashions in India (Plate III.) Von Orlich, who visited Delhi in 1843, writing of the buildings to the North of the *Diwān-i-Khāṣṣ*, says, "several parts are however so decayed that the baths and apartments cannot be used." "The garden, too, (the *Hayat Bakhsh* garden ?), in the centre of which is a basin and several fountains, has been deprived of all its original beauty by tasteless additions and alterations."¹

The Fort itself did not suffer much damage during the fighting that went on **The Mutiny.** round Delhi during the Mutiny, but, on the occupation of the city by the British troops, the palace suffered still further spoliation of what little removeable decoration was left. The sheets of copper from the kiosks of the *Diwān-i-Khāṣṣ* were taken by a prize agent on the plea of being moveable property, while eleven black marble plaques were taken from the recess at the back of the throne in the *Diwān-i-Āmm*, and set in a marble table top. The figure of Orpheus (Plate XI) was also removed and all twelve pieces sold to the British Government.² With the exception of the more important buildings on the East front of the Fort, and the *Diwān-i-Āmm* and the Naubat *Khāna*, a clean sweep was made of the rest of the palace buildings, so as to give the accommodation and space necessary to a garrison.

This account of the long chain of calamities, through which the "Imperial Seat" of *Shāh Jahān* has passed, will go far to dispel the idea, held by so many, that its spoliation was wholly the result of the English occupation after the Mutiny. Since the occupation, it is true, repairs have from time to time been carried out by the Military Works Services who were in charge of the buildings till 1901, but it was not until nine years ago that the systematic preservation of this group of historical buildings and their immediate surroundings was actively taken up. Many of the buildings were then sadly in need of repair, others were used as barrack rooms or stores, while the area in which they stood was cut up by modern roads, and disfigured by unsightly military buildings. The old levels of the ground had been obliterated, and the bewildered visitor to the palace of the 'Great Mogul' wandered aimlessly about from building to building. Seen in these conditions, the palace lost much of its interest, and it was impossible for the average intellect even to attempt to revisualise its former condition. The associations of the Fort, its place in history and architecture, demanded that something should be done and the gardens as they now stand are, together with the completed conservation of the buildings, the outcome of the recommendations made to the Government of India in 1902 by Dr. Marshall, the Director General of Archæology. These suggestions embodied the acquisition from the military authorities of as much of the old area formerly occupied by the palace, as was possible, and its enclosure with a barrier which would enable it to be kept in a state of orderliness, and the buildings it contained secure from further molestation or damage. This done, the thorough

**Condition of the
Archæological
Area in 1902.**

**Scheme for
Conservation of
the Area.**

¹ Von Orlich. *Travels in India*. Translated by Lloyd. London 1845.

² Major H. H. Cole, R. E. *Preservation of national monuments in India, Delhi*, 1884. Major Cole adds that he learnt from General Cunningham that the mosaics before the Mutiny were in a neglected condition and that stones had been extracted, possibly by the native guards of the palace.

conservation of the buildings was to be taken in hand, the ground was to be reduced as far as was possible to its old level, and the modern buildings and roads removed, while the area was to be laid out in pleasing lawns and shrubberies so that the buildings might be seen under more happy conditions. (Figs. 4, 9, 11, 15, etc.) The lawns and shrubberies were to represent, respectively, the position of former courtyards and buildings which had been removed but whose position was clearly marked by the remains of their old masonry foundations and corroborated by old plans of the Fort. In the case of the northern portion of the area, the Hayāt Bakhsh garden, where traces of the old water channels and causeways were abundant (Plate 4), but buried under three feet of earth and rubbish, the fact that the gardens would be eventually used for occasions such as the Royal Garden Party held during the recent Darbar necessitated more reconstructive work, so that the old channels and fountains could be made to fulfil their former functions. It must not be imagined that, small though the area may appear to many, this has been all accomplished with a sweep of the pen. The case of the Hayāt Bakhsh garden alone involved the receipt and despatch of some 1,000 letters from the local office, the sitting of a special Military Committee, and numerous representations to the higher authorities. Besides the Director General, two other members of this Department, Mr. Nicholls and the late Mr. R. F. Tucker, have been closely connected with the work which is here described.

**Evacuation of
Area by Military.**

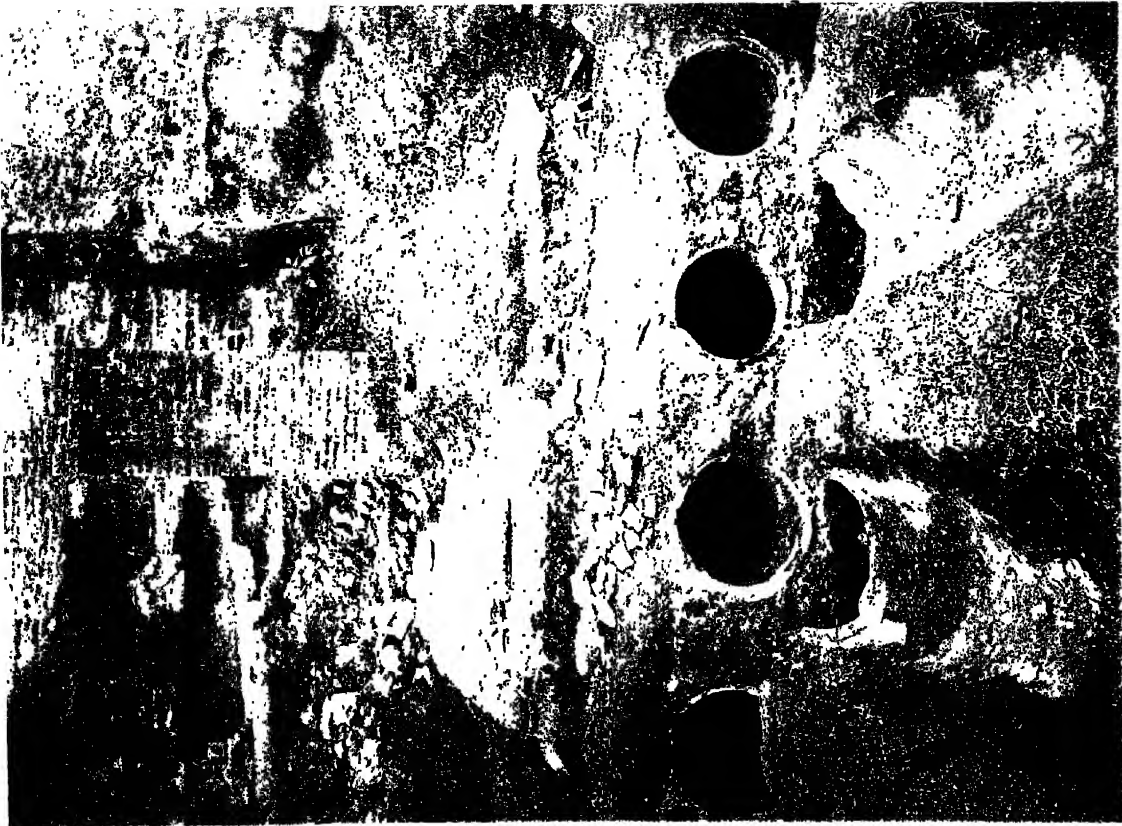
The evacuation of the ground by the Military authorities, the erection of new buildings to take the place of the modern ones demolished inside the area, the difficulties of irrigation owing to the danger of mosquitoes breeding in stagnant water, are but a few of the questions that had to be settled before the scheme could be successfully brought to a conclusion. There were times, indeed, when it seemed as if the difficulties were too great to be overcome. Year by year, however, the programme of rescue and repair went steadily forward, and in spite of set-backs due to want of funds and other causes was within measurable distance of completion, when, in 1911, the advent of the Coronation Darbar gave an unlooked-for opportunity of bringing the work to a speedy and successful finish.

**The Hayāt
Bakhsh Garden.**

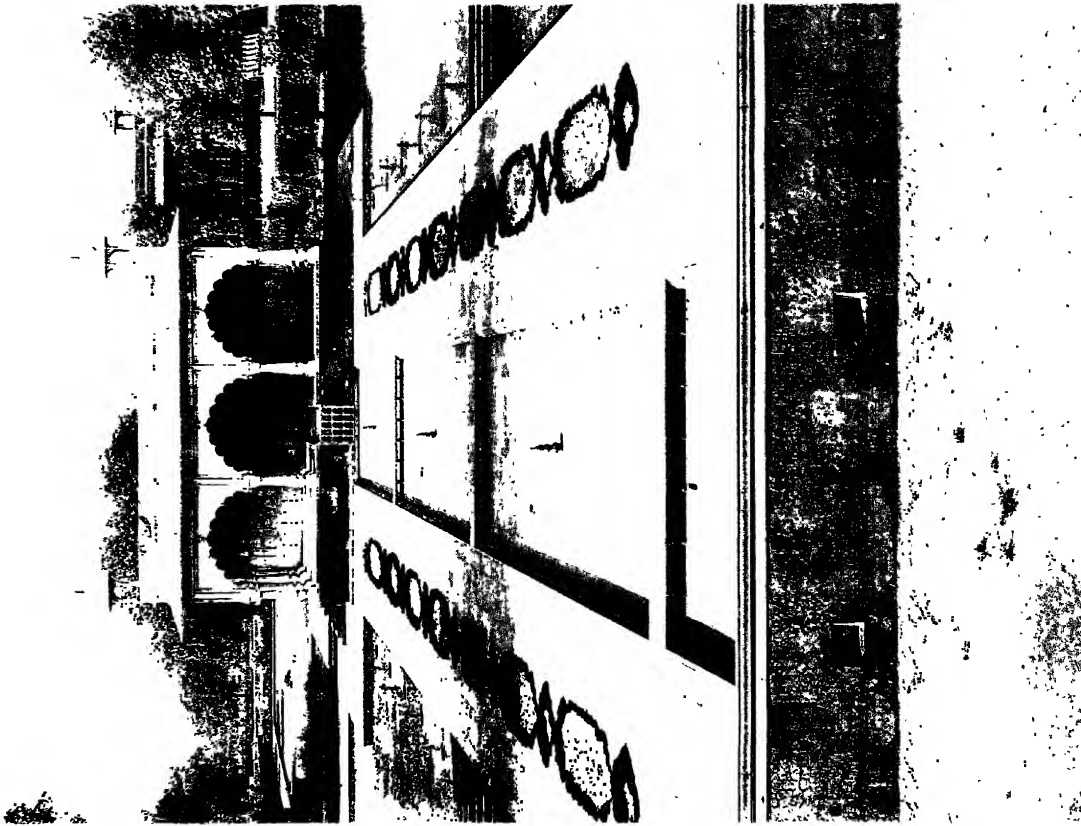
In 1904-1905 excavations were made on a large scale in the Hayāt Bakhsh garden, which laid bare the old central tank (see Plate V) and water channels, and the extent of the former, of which the Zafar Mahal is the central feature, was accurately determined. In 1905-1906 the work was continued and a start made on the reconstruction of the old channels. Fragments of the ornamental kerb and causeways were found between the tank and the Sāwan pavilion, and from these, together with the old plans which showed the border, it was possible to carry out the work with perfect accuracy to the original. The large central tank built by Shāh Jahān appeared to have been deepened, probably at the same time as the Zafar Mahal was erected in its centre, and this had been done by building a parapet on the top of the ornamental border. Had this parapet been added by the British the course would have been obvious but it bore elaborate surroundings and was manifestly Mughal work.¹ Accordingly, it was felt that the traces of the parapet's existence should not be destroyed and the missing portions of it were, therefore, restored, so that the tank could be filled up to the higher level. (Plate V.)

**The Zafar Mahal
Tank.**

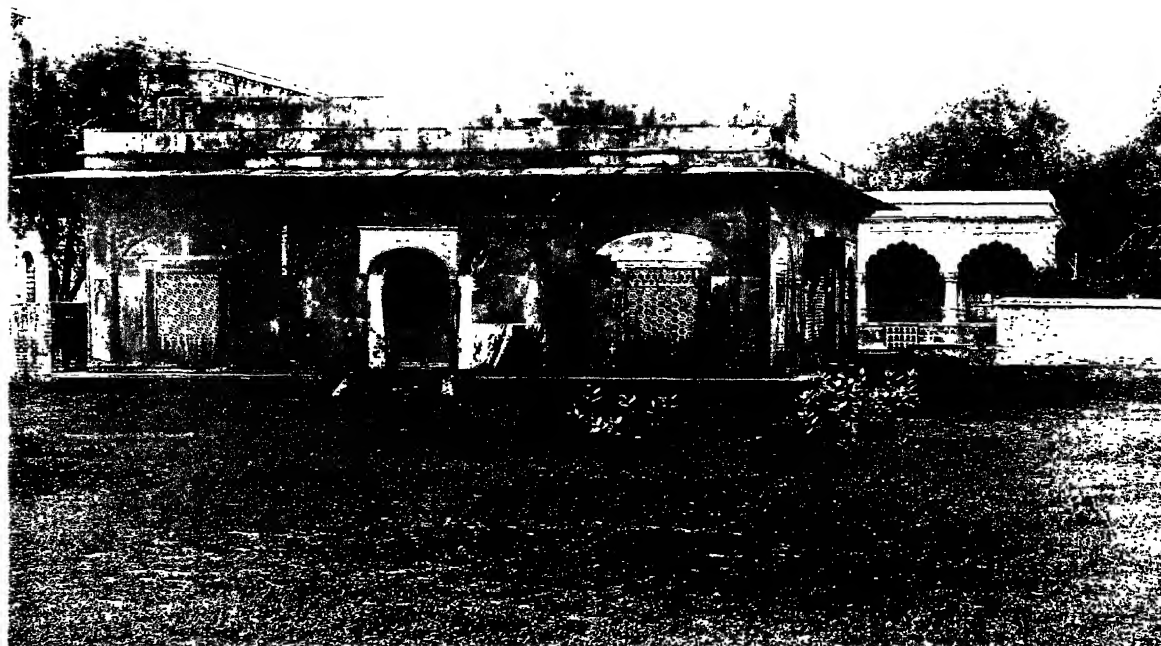
¹ *Annual Progress Report*, Superintendent M. and B. Monuments, 1906, p. 23.



(Fig. 8.) OLD WATER PIPES DISCLOSED NEAR
THE BHADON PAVILION.



(Fig. 4.) THE SAWAN PAVILION AFTER CONSERVATION
AND RECONSTRUCTION OF CAUSEWAYS.



(Fig. 5.) THE ZAFAR MAHALL AND CENTRAL TANK BEFORE EXCAVATION.



(Fig. 6.) THE SAME, AFTER EXCAVATION OF TANK AND REPAIR.

The parapet round the tank was completed in 1906-1907, while the work on the four main causeways with their channels, pavements, and ornamental beds was proceeded with. The latter were completed in 1907-1908, and in the course of further excavation work the existence of subsidiary channels was discovered, dividing each quarter of the garden into four equal squares. The clearance of the entire site was not attempted until 1908-1909, there being difficulties in finding a place to dump the spoil earth taken from the site. Further excavations then revealed a pathway on the east side of the garden connecting the North and South pathways, only part of which has been repaired up to date, while the remainder will be completed as soon as the Battery and Military Road to it on the East terrace have been removed.¹ It was a pity the site could not have been lowered to its original level in the first instance as the sides of the channels were, after they were dug out, found to be in a *kacha* state and in need of considerable repair.

In the summer of 1908 a conference was held at Simla at which the Director General of Archæology and representatives of the Military authorities were present, and among other important points it was decided that the tank and channels of the Hayāt Bakhsh garden could be filled with water between the 1st December and 31st March, servants' quarters within the archæological area demolished, and that the Naubat Khāna, the Shāh Burj and the Mumtāz Maḥal could be included in the area. Unfortunately the first of these decisions has since been cancelled by the Military authorities.

In 1909-1910 substantial progress was made in the work on the gardens, and the iron railing round the area was practically complete. The main entrance to the garden was made at the Naubat Khāna, thereby reviving the old Mughal custom; for it was at this point that all visitors to the court with the exception of princes of the blood royal, descended from their palanquins or elephants and approached the Royal presence on foot. Another subsidiary entrance was provided to the South of the Diwān-i-ʿĀmm, and a special military entrance near the Shāh Burj, so that access could be gained to the battery on the East terrace. In the Hayāt Bakhsh garden, the work on the minor intersecting causeways with their water channels was completed, and the whole of the area of the garden lowered to its original level and dressed ready for grass. (Plate 7^a.) At the end of the year the work on the water supply which now irrigates the whole area was well in hand. The water is raised up from the old wells, into reinforced-concrete tanks behind the Bhadon pavilion, by means of electrically driven pumps.

In 1910-1911, the Hayāt Bakhsh garden was grassed and planted. The position of the old buildings, which enclosed it on the North and South, is indicated by dense masses of flowering shrubs, while a screen of conifers, backed by Gravillia trees, masks the iron railing which surrounds the area, and will, at full growth, screen off the unsightly modern barracks from the gardens. With the exception of the east terrace the garden was now finished and it was easy to see that the whole area, completed on these lines, gave abundant promise of future charm.

The east terrace of the Hayāt Bakhsh garden is raised some 5 feet above the level of the main portion. There were buildings on it formerly, and excavation

East Terrace :
Hayat Bakhsh
Garden.

¹ The battery is now (Nov., 1913) under removal.

revealed traces of these and of a retaining wall which ran along its western face. The backing of this wall was found and has been preserved by Mughal brick masonry with recessed pointing. This wall ran from the north wall of the Hammam to the Shāh Burj, but it has been impossible to continue its alignment beyond a point opposite the Hira Maḥal owing to the presence of the gun battery and military road which gives access to it. Negotiations are, however, on foot for the removal of these, and it will then be possible to continue the wall along to its termination near the Shāh Burj, in place of the grass bank which has been temporarily made here.¹

Moti Maḥal.

The removal of the battery may bring to light traces of the pavilion named the Moti Maḥal (Pearl Palace) that formerly existed here.² The whole terrace has now been grassed and the outlines of the water channel named the Nahr-i-Bahisht (Stream of Paradise), disclosed by excavation, have been defined by Mughal bricks on edge.

Hira Maḥal.

In front of the Hira Maḥal, a marble pavilion built in A. D. 1842 by Bahādur Shāh II, traces came to light of a shallow basin, with a channel leading westward, evidently to connect up with the minor channel of the Hayāt Bakhsh garden which runs into the causeway near this point. The Nahr-i-Bahisht was provided with fountains at frequent intervals and the copper pipes of several of these were found.³ After running along the East terrace in the manner described the water entered the channel in the Hammam and so passed on along either range of buildings to the Rang Maḥal. Near the Hira Maḥal a vaulted subterranean passage was discovered which will be explored in the near future. It appeared to run North and South along the East wall.

**Account of the
Hayāt Bakhsh
Garden by
Shah Jahan's
Historians.**

From the following description of the garden by the contemporary historians we can picture for ourselves the condition of the gardens in the days of Shāh Jahān.

“This *Iram*-like⁴ Hayāt Bakhsh garden, which, by the display of its beautiful flower-beds, of the various green plants, and blessed flowers, and by the running water-channels facing the garden, in the name of Holy God is a garden, the wave of the fresh grass in which has surpassed the roses; the fruitful trees of various kinds are interlaced with each other in such a way that the sky is not anywhere visible beneath them. Particularly the tank in its centre, which is 60 *gaz* by 60 *gaz*, is shining as a sun-like mirror with its waving light, and is decorated with forty-nine silver jets, besides 112 more jets which play round it. In all its four avenues, each of which is made of red sandstone, and completed with the breadth of 20 *gaz*, there is a channel 6 *gaz* broad which flows with 30 playing fountains in its centre. At the left and right (sides) of this garden, two charming buildings, (Sawan⁵ and Bhadon⁶), decorated with pictures and paintings like the enamelled

¹ See foot-note 1, p. 9.

² See the old map of the Fort in the Delhi Museum of archæology. Also *Āthār-u-ṣ-Ṣanādīd* (Lucknow 1874), Chap. II, p. 17.

³ Sayyid Ahmad writes. “the old zigzag channel in front of the Hira Maḥal had twenty-four silver fountains, now not to be traced, but the channel still exists.”

⁴ *Iram* is the name of a fabulous garden, famous in eastern poetry. It is said to have been made in Arabia Felix by a King named Shaddād, son of ʿĀḍ, or Iram, son of Omad.

⁵ Sawan, a Hindi month corresponding to July-August, the first month of the rainy season.

⁶ Bhadon, a Hindi month corresponding to August-September, the second month of the rainy season.

throne of the Queen of Sheba, or like Solomon's throne studded with emeralds, have been built. Through the two waterways of the tanks which are made in the centre of these buildings, the water is always issuing gracefully, and from the edge of their platforms, which have the height of $1\frac{1}{2}$ *gaz* (from the ground) it is falling into the tank below, in the form of a cascade. In the niches, flower-vases of gold and silver, full of golden flowers are placed during the day time, and at night, white wax candles, which look like stars amid fleecy clouds, are lighted inside the veil of water."¹

Bishop Heber describing the Hayāt Bakhsh gardens says: "they are not large but in their way, must have been exceedingly beautiful. They are full of very old orange and other fruit trees, with terraces and parterres, on which many rose bushes were growing, and even now, a few jonquils in flower."²

The Zafar Mahal was built by Bahādur Shāh II, the last Mughal Emperor, Zafar Mahal. 'Zafar' being his poetical name. Sayyid Ahmad in his account of the building says that, 'on one side a bridge for ingress and egress has been built.'³ This has disappeared. To the west of the Hayāt Bakhsh garden lay the Mahtāb Bagh, Mahtab Bagh. (Garden of moonlight).⁴

Sayyid Ahmad writes, "In the middle of this garden (the Mahtāb Bagh), a large canal flows very pleasantly. His Exalted Majesty Sirāju-d-din Muḥammad Bahādur Shāh has now made a *jhirna*⁵ of red stone near the canal towards the west like that⁶ of the Qutb Sahib, and the garden has been much improved by this. In this garden there is a Holy Footprint, (*Qadam Sharif*)."⁷

To the south west⁸ of the Hayāt Bakhsh garden stood a small mosque, commonly known as the "Chobi Masjid," or Wooden Mosque. It existed up to the time of the Mutiny of 1857, as we find it mentioned as follows in Sayyid Ahmad's work, but no trace of it is now left. "This mosque was built by King Ahmad Shah in A. H. 1164, (A. D. 1750) and being supported by columns and arches of wood, was known by the name Chobi Masjid. It was entirely ruined, but was re-built in A. H. 1267 (A. D. 1850) at Government expense."⁹

On the entrance of the mosque was the following inscription¹⁰ :—

دناکرد مسجد سه دین بغاه که سد یاررش دولت سرمدی
بردهر که آنجا سجون بیار بانوار طاعت شود مهندی
حرد را تحیرت فرورفت پای چو سد وکر تاریخ را مبدی
بگفتا سرورش ار سر بر نری به نیت شرف مسجد احمدی
سده ۱۱۶۴

¹ 'Amal-i-Salikh, fols. 580-83, Sayyid Ahmad gives the same description, and it is probable that the above work is his real source. (*Āthāru-ḡ-Sanādīd*, Cawnpore 1904, Chap. II, pp. 45-48.)

² Heber's Journal. Vol. II. p. 303. The Bishop was at Delhi at the end of December, 1824.

³ *Āthāru-ḡ-Sanādīd*, Lucknow 1878, Chap. II. p. 20.

⁴ It is not unreasonable to suppose that excavation might reveal traces of this garden.

⁵ *Jhirna*, a kind of shower bath, or water-fall.

⁶ The author is perhaps referring to the *Chute* in the Jhirna garden near the Dargah of Qutb Sahib, to which the Emperor added some buildings.

⁷ Op. cit. Lucknow 1874, Chap. II, p. 21. It should be remembered that "*Qadam Sharif*," literally a noble foot here means the footprint of the Prophet. Most probably it is the same which was kept in the Delhi Municipal Museum and was lately removed to the Delhi Museum of Archaeology, see *Museum Catalogue* C. 28 and 29.

⁸ See the old map of the Fort in the Delhi Museum of Archaeology Catalogue No. K. 2.

⁹ Op. cit. Cawnpore 1904, Chap. III, p. 92.

¹⁰ This inscription is taken from *Miftāhu-l-Tawarikh*. T. W. Beale. Cawnpore, 1867, p. 332, where it is compared with that recorded in *Āthāru-ḡ-Sanādīd*, Lucknow 1874, Chap. II, p. 21.

"This mosque was built by the King Protector of the faith,
 "Who received help from Divine power.
 "Whoever performs the prostrations of supplication there,
 "Will be guided by the light of worship.
 "The foot of wisdom slipped in astonishment,
 "When he began to deliberate about the date.
 "The angel, with an idea of preeminence said :
 "The mosque of Ahmad has attained the highest mansion of a planet."
 "Year 1164."

The Sawan and Bhādon Pavilions.

Reference was made in the Annual for 1903-1904 to the discovery of the tanks in the Sāwan and Bhādon pavilions, which are the central features on the North and South sides of the Hayāt Bakhsh garden, while the change in the conditions of these buildings and their surroundings is apparent from Plate IV, fig. 1

Plates VII and VIII also illustrate the work that has been done elsewhere in the gardens and give a glimpse of the orderly lawns stretching towards the Rang Mahal. The small roof *chattris* have, in the case of the Sāwan, been provided with new domes, and, in the case of the Bhādon, reconstructed.

The Shah Burj.

An account of conservation work that has been done at the Shāh Burj has already been given at some length in a previous report¹ as well as a description of this building. The old drawing (Plate VI) shows the *chattri* or kiosk that formerly existed on its roof, and which corresponds with the one on the bastion at the southern end of the East Wall of the Fort, which is named the Āsad Burj (Lion Tower).

Hamman.

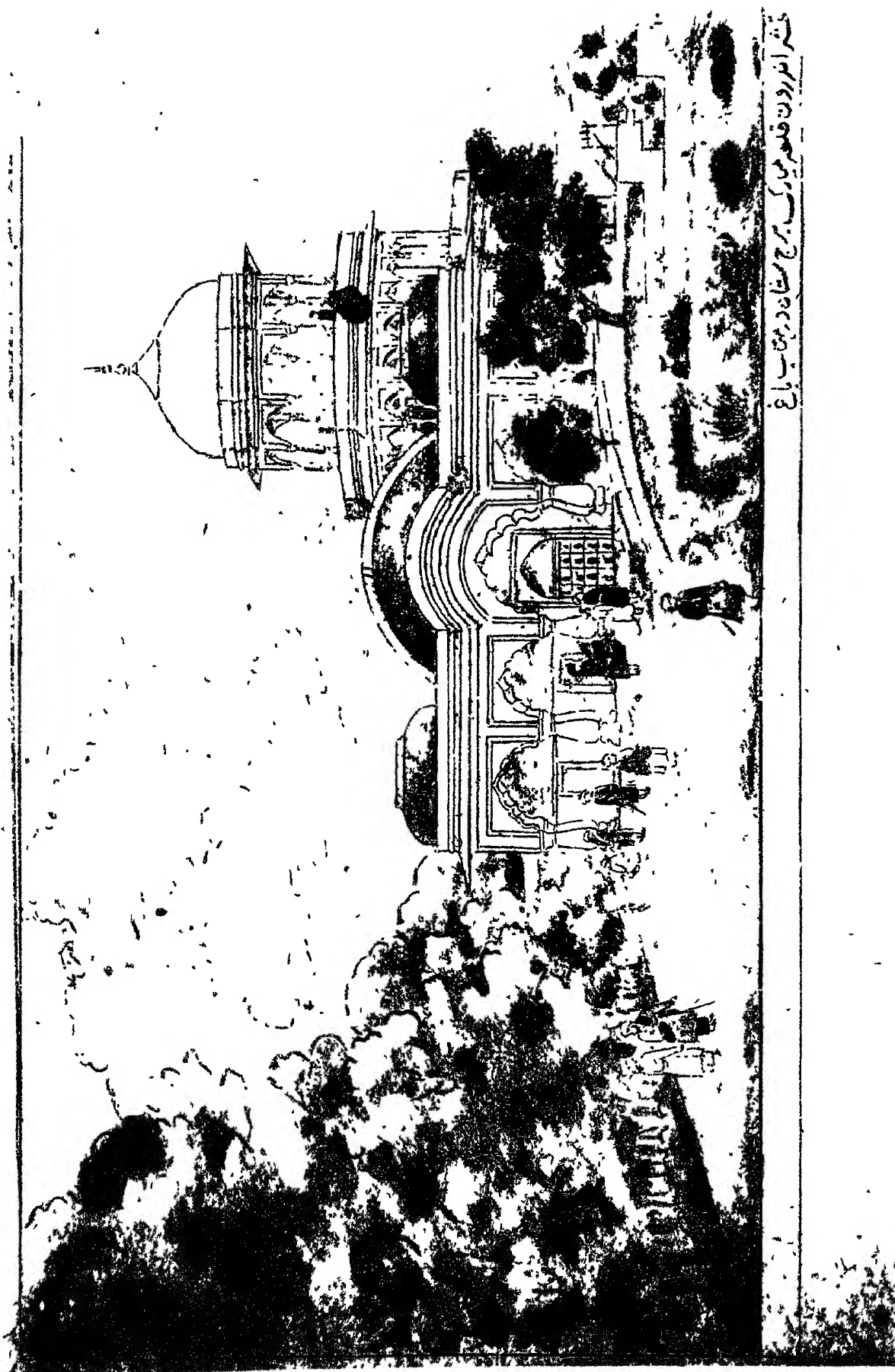
Returning southward we pass through the gateway that led from the Diwān-i-Khāss courtyard to the Hayāt Bakhsh garden and reach the Hammām. In 1904, doors, which the military occupants had made in the walls of the royal bathrooms, were closed up, and the dado that had been removed to make way for them was restored, while in the central chamber an unsightly modern window frame was removed and a marble one substituted in keeping with the older types that still exist in the east wall of this building. Doors of Indian pattern, also, have since been provided for the south entrances of the building. Sayyid Ahmad says that the Hammām was never warmed after the reigns of Shāh Jahān and 'Ālamgīr (Aurangzeb), and adds that 125 *maunds* of firewood were required to heat it.²

Marble Balustrade on East Wall.

Mention must be made here of the marble balustrade that has been erected along the East wall of the Fort from the Hammām to the Rang Mahal to replace the former in congruous wooden and iron railings. Some barrier in keeping with its surroundings was essential, and, a restoration of the original screens being out of the question owing to lack of data, it was felt that such a type of railing, which, it may be added, is found used in a somewhat similar position in the Fort at Agra, would be a suitable solution to the difficulty. A simple red sandstone balustrade of Mughal pattern has also taken the place of the iron railings which ran from the Hammām to the Shāh Burj, and from the Rang Mahal to the Mumtāz Mahal.

¹ *Archaeological Survey of India, Annual, 1909-1910*

² *Āthār-i-Sanādīd*, Calcutta 1904, Chap. II, pp. 43-44.



(Fig. 7.) AN OLD DRAWING OF THE SHAH BURJ, SHOWING THE OLD CHHATRI
(NOW DESTROYED) ON THE ROOF.

The conservation work effected to this little mosque has already been referred **Moti Masjid.** to.¹ Marble domes wholly disproportionate particularly in respect of their finials to the size of the mosque were erected after the mutiny in place of the original domes covered with gilded copper, which had shared the same fate as that which covered the dome of the Muṣamman Burj and the *chattris* of the Diwān-i-khāṣṣ.² Carr Stephen gives 1070 A. H. (1659 A. D.) as the date of the building while the contemporary historian of Aurangzeb, from whose account the following is an abstract, gives 1073 A. H. as the date of the completion of the main structure, the decoration being finished a year later³. Shāh Jahān seems to have built no mosque in the Fort, the Jamī 'Masjid being his place of worship. Aurangzeb, however, "always," as the historian says, "inclined to attend devotions," wished that "near the private bed chamber, a small mosque should be built, and a graceful place of worship erected, so that at various times of the day and night, after a short walk from the blessed bed-chamber to the sacred place of worship, he might partake of the service of holy God, and the worship of the Lord of Lords, at his ease, and without the trouble of a retinue or long journey. Therefore to the North of the blessed Ghūsl khānah, between the buildings of this beautiful and glorious palace, and its paradise-like garden, (known by the name of Hayāt Bakhsh), a piece of land was selected for this noble edifice, and, with the Divine assistance, an auspicious mosque of white marble was built." The foundations were laid by the Emperor's orders on the 3rd day of Rabi'ū-th-thānī, "while he was shooting and hunting on the bank of the river Ganges." "The date of the completion of this holy building—the abode of angels—was discovered by " 'Āqil Khān, the ablest servant of the Court in the following verse⁴ of the Qurān".

رَأَى الْمَسَاجِدَ فَلَا يُدْعَىٰ مَعَ اللَّهِ أَحَدًا

"Verily the places of worship are set apart unto God, wherefore invoke not any other therein together with God."⁵

The above-mentioned chronogram was, the historian adds, approved by the King, and "according to the supreme order it was carved in a stone slab in that holy place." This inscription is unfortunately no longer traceable.

Early in January, 1911, Sir John Hewett with the Darbar Committee visited the gardens, and it was decided that a Royal garden party should be held there at the time of the Darbar. With the exception of the Hayāt Bakhsh garden, the rest of the area was in the old untidy condition, and much still remained to be done. The Committee intended that the place should be put in order and the President was, moreover, anxious that whatever was done should be in perfect harmony with the palace buildings. It was fortunate, therefore, that this Department had ready a scheme which, besides securing the future of the gardens, entirely met with the

Work on gardens
to be finished
for Coronation
Durbar.

¹ *A. S. I. Annual* 1903-1904, p. 22.

² Hearn. *Seven cities of Delhi*, p. 14.

³ Maḥammad Kāzīm 'Ālamgīr nāmāh. Bibl. Ind., pp. 467-70; also refer *Āthār-ū-Sanādīd*, Lucknow 1874,

Chap. II., p. 18.

⁴ It is the 18th verse of the chapter "Genii."

⁵ *Sale's translation of the Qurān*, London 1857, p. 468.

approval of the Committee. Orders were given accordingly to complete the work on the remainder of the garden without delay. The most difficult part of it was the trenching for the shrubberies and lawns as the débris of buildings and roads had to be removed and suitable earth provided.

Tank in front of Rang Mahal.

The large tank between the Rang Mahal and the Dīwān-i-‘Āmm, which had been filled up and crossed by a military road and a drain, was excavated (Plate VIII). Traces were found in its centre of a little square building, with a central tank, probably on the lines of the Zafar Mahal in the Hayāt Bakhsh garden, and reached by a little causeway¹ the bases of the piers of which were found. These, with what remained of the building, have been carefully preserved. It has not been possible hitherto to provide sufficient water for this tank and, accordingly, the bottom has been grassed. Part of its old coping was found *in situ* and also an old stone ring, built in one corner of the tank, which points to the probability of its having been screened from the sun by a *shamiāna* (awning).

Marble basin.

The marble basin (Fig. 11) originally belonging to the Fort, but which had found its way into the Queen's gardens in the city, has been brought back and placed in the centre of the little building in this large tank. Old pictures clearly show this basin *in situ* in front of the Rang Mahal, but how far from it, it is not easy to decide; it has consequently been set here as being as near its old position as could be approximately determined.² The paths have been laid down following as far as possible their old lines.

Garden in front of Diwan-i-Khass

The transformation in front of the Dīwān-i-Khāṣṣ is indeed a striking one. Grass lawns representing the twin courtyards which existed in front of this building, have taken the place of the unhappy little garden that existed there till recently. The broad sweep of grass, running right up to the plinth of the building, forms an admirable setting. The modern ceiling, which has been substituted for the old silver one, was regilded during the year and this building was used during the garden party for the reception of the Royal guests.

Description of Diwan-i-Khass.

In earlier times the Diwan-i-Khāṣṣ was known as Shāh Mahal or Daulat Khāna-i-Khāṣṣ and even, by a misnomer, as Ghul Khāna³. “Abdul Hamīd Lāhōri, Shāh Jahān's court chronicler, tells us the purpose of such a hall, and the names by which it was known :—

“The Daulat Khāna-i-khāṣṣ, by the wonderful art of expert artists, and astonishing craftsmen, has been built between the Zanāna apartment and the Dīwān-i-‘Āmm, and the Lord, Possessor of the world, after leaving the Dīwān-i-‘Āmm, honours that delightful house, and reposes on the royal throne. Here certain important affairs of

¹ The tank when completed must have been not unlike the one near the Turkish Sultāna's house at Faḥpur-Sikri.

² For an historical account of this garden and central tank refer to *A. S. I. Annuaire* 1907-1908, p. 29. See p. 21 regarding the former position of the marble basin.

³ Manucci refers to the Dīwān-i-Khāṣṣ as the *Ghul Khāna* in the following passages :—

(1) “Four horses, ready saddled for emergency, are kept near the door of the *Ghul Khāna*, the place where audience is given and justice dispensed.” *Op. cit.* p. 301, (2) “This prince (Shāh ‘Ālam) held me in such affection that he granted me permission to enter the *Ghul Khāna*, which is a secret place where the second audience is given and the council sits. Into it only the principal lords and officers of the court enter.” *Op. cit.*, p. 400. Referring to the Royal establishment, Manucci says (3) that “there is an officer styled Darogha Do Cossa Choqui (Darogah of the Khāṣ Chāukī), that is officer of the chosen sentinels; the reason is that the company to which this name is given are all picked men and of the noblest families. Ordinarily they number 4,000 horsemen. This officer has charge of the Gousal Cana “(*Ghul Khānah*)” *Op. cit.*, p. 422.



(Fig 8) GARDEN IN FRONT OF RANG MAHALL, BEFORE CONSERVATION



(Fig 9) THE SAME, AFTER CLEARANCE OF OLD TANKS AND REPAIR OF CAUSEWAYS



(Fig. 10) THE RANG MAHALL, WHEN USED FOR OFFICERS' QUARTERS



(Fig. 11.) THE SAME, AFTER DEMOLITION OF MODERN ADDITIONS AND CLEARANCE OF DEBRIS IN FRONT.

state, which are not known except to confidants and court favourites, are settled by the problem-solving attention of the Emperor's heaven-like court, and angel-like power. As this prosperous house adjoins the Hammām, it is therefore known by the name of Ghul Khāna [which was given to such buildings] in the time of His Majesty Akbar. In the [present] auspicious reign it is called Daulat Khāna-i-khāss.¹ The decoration of its ceiling is highly praised by native historians as well as by European travellers. Muhammad Salih says that 9 lacs were spent on it.²

Sayyid Ahmad's account is as follows :—

“To the north of the Khwābgah, a big square (*chauk*), is to be seen, and to the east of this, is a platform $1\frac{1}{2}$ gaz high. In its centre is built the Diwān-i-Khāss Palace. (Plate IX, fig. 12). Through its centre there flows the channel called Nahr-i-Bahisht, which is 4 gaz wide. In the middle of this edifice, another room, 18 gaz in length and 10 gaz in breadth, is formed by erecting square columns with a platform in the centre. Cornelians, corals, and other precious stones are inlaid in dados in which flowers and foliage have also been carved. From dado to ceiling it is adorned with golden work. Its windows on the river side are closed by finely carved screens, the perforations of which are filled with glass. To the west of this there is a courtyard, 70 gaz \times 60 gaz, round which rooms and arches of red sand-stone have been built, and to the west of this is an entrance which was connected with the Diwān-i-Āmm by a passage. In front of the entrance a red curtain is fixed up. At the time when the Darbār is held, all the Amirs perform the ceremony of obeisance from this place. There is another gateway, to the north of this courtyard, leading to the Hayāt Bakhsh Garden, and to the south is a gateway leading to the entrance of the Royal Harēm. In front of the central arch of this building, towards the court-yard, a marble balustrade is erected. It is known by the name of *Chaukhandi-i-Diwān-i-Khāss*. Its ceiling was of pure silver, but in the raids of the Marāthas and Jāts it was torn off.”³

Ahmad Shāh's contemporary historian says that “it was from off the Diwān-i-Khāss that Badū,⁴ on account of his mean nature and the narrowness of his mind, took the silver of its ceiling, and turned it into money.”⁵

A word must be said as to the new shrubberies. They are composed first of an encircling *inga* hedge kept closely trimmed, so as sharply to define the area of the former buildings. This is backed by rows of *acalypher* and *duranta*, while behind these again are taller shrubs such as *Murya*, *Havelia*, *Bougainvillea*, (the compact variety), *Pybiscus*, *Tecoma*, etc. At full growth the effect should be very fine and their appearance already does Mr. Locke, the Government Gardener, credit. It should be added that in trenching for these shrubberies the foundations of the old buildings were found, as expected, in almost every case. Grass courts have similarly been formed in front of the Diwān-i-Āmm and Mumtāz Mahāl.

In the case of the first building the old courtyard, which formerly existed in front

¹ *Bādshāh Nāmāh* (Bibl. Ind.) Vol. II, p. 220; *ibid.* Vol. I, Part II, p. 237. Also see '*Amal-i-Salikh*', fols. 579-80.

² '*Amal-i-Salikh*', fol. 580.

³ *Āthār-u-Sanādīd*, Cawnpore 1904, Chapter II. pp. 41-42.

⁴ Badū, one of the Peshwas of the Marāthās.

⁵ Ghulām 'Alī, '*Āzād Bilgrāmī Khazānah-i-Amirān*', Cawnpore 1900, p. 104.

Description of
Shrubberies laid
out to represent
former build-
ings.

of it (Plate 15) and which witnessed the daily Darbar of the Emperor, was lined at either side by *dalans* or colonnades, as at Agra. All traces of these had vanished and a military road ran between the Naubat *Khāna* and the Diwān-i-‘Āmm.

Muhammad Salih's account of the Diwān-i-‘Āmm is as follows:—

Diwān-i-‘Āmm.

"To the west of the Imtiyāz Mahal (Rang Mahal) there is an 'aiwān' ¹ overlooking the garden of that building. It is of red sand-stone, but rendered (?) white by the *Pathani* ² stone. It has received an elegant polish, like the brightness of the morning, on shell-plaster applied by skillful workmen. Near the ceiling is the *jharoka* of the *Khāṣṣ-o-‘Āmm*, (Diwān-i-‘Āmm), which is the place of the people's prostration, as well as for the relief of their needs. It is built of pure marble like a pavilion (*banglā*), 4 *gaz* by 3 *gaz*, and is supported by four columns. Behind the *jharoka* there may be seen a niche, 7 by 2½ *gaz*, which is famed for its various coloured stones inlaid into the wall, and which, through the skill of excellent art workers, has been adorned with many rare pictures, and a railing of pure gold on three sides. This auspicious place is honoured by the Emperor, who takes his seat in it early every day. In front of this, there is a magnificent and lofty hall, ³ supported by forty columns, and measuring 67 [*gaz*] by 2½ [*gaz*]. The elegance and beauty of its walls and ceiling, painted with different colours and various pictures, have put out of countenance the work of Manī, ⁴ A silver railing of man's height is erected round three sides of the hall. Outside this, another spacious 'aiwān,' 104 [*gaz*] by 60 [*gaz*], has been cut off from the enclosed court of the *Khāṣṣ-o-‘Āmm*, and a railing, (*kalēhra*), of red sand-stone, with golden paintings, erected at the edge of its western side. Beyond that there is an open courtyard, 20½ *gaz* by 160 *gaz*, with beautiful colonnades round it to protect the people from the sun and rain. Of the three gates of this courtyard, the western gate ⁵ is built of red sandstone with splendid carvings."⁶

The vastness of the courtyard, wherein a throng of courtiers daily assembled before the 'Great Moghul,' is now suggested by a pleasant stretch of lawn (Plate X, fig. 15) and the gorgeous colonnades, decked out in rivalry by the nobles of the realm, by screens of flowering shrubs. The shrubbery to the north of the central pathway occupies almost the same position as the old colonnade, but the shrubbery

¹ This refers to the gallery at the back of the Diwān-i-‘Āmm, which faces the Rang Mahal and from which there is an entrance to the *jharoka* chamber.

² The text has *Multāni*. This seems to mean *chunām*.

³ Shāh Jahan seems to have been the first Emperor to have erected permanent halls in front of the *jharoka*. The Diwān-i-‘Āmm at Agra, and also that at Lahore, were built by him. Previous to these we have many references to similar halls, but they appear to have been temporary structures only, and in some cases were taken on loan with the Emperor's courts. An account of the erection of the Diwān-i-‘Āmm hall at Agra, taken from *Bādshāh Nāmāh* (Vol. I, Part 1, pp 221-222), will be found in the *A. S. I. Report* for 1902-03, pp. 220-21.

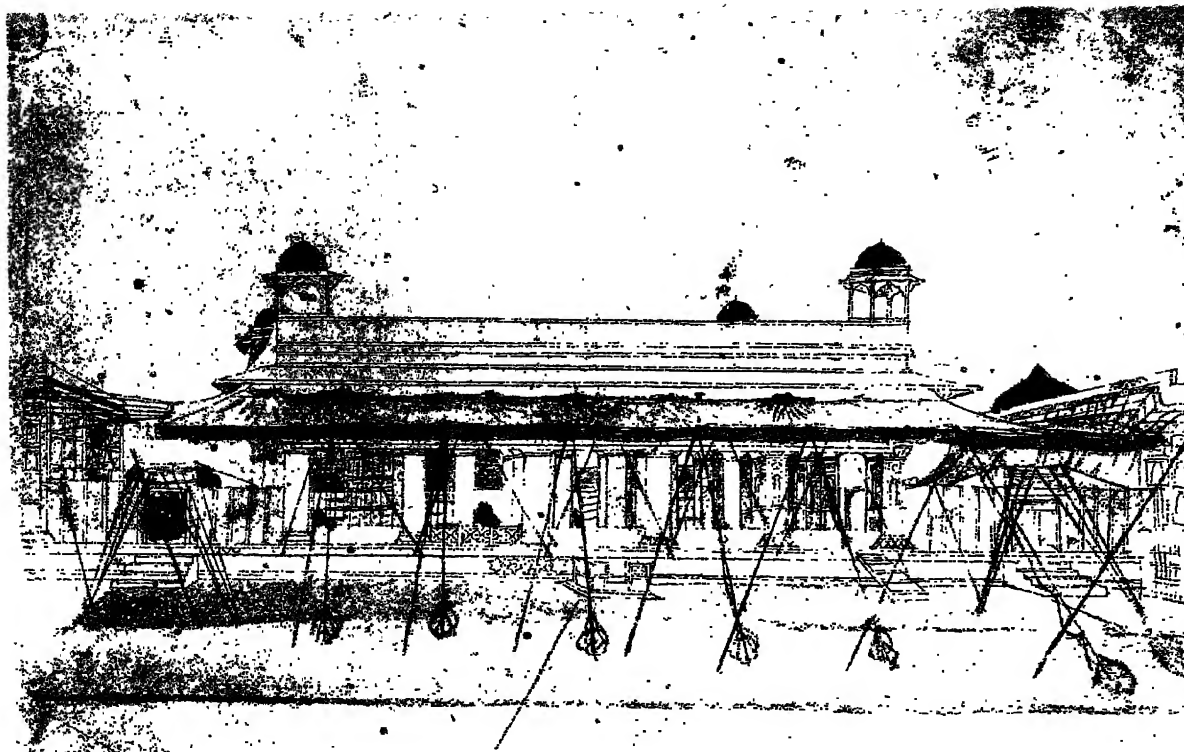
It is interesting to note that, long before the Mughal period, it was customary among the Muhammadan Kings of India to have a big hall in which *Darbārs* were held and the same ceremonies performed as in the Diwān-i-‘Āmm in Mughal times. Ibn-i-Batūta, a traveller, who visited India in the reign of Sultan Muhammad Tughlaq, tells us in his travels that the *Harār Sutūn* " (an *aiwān* supported by one thousand wooden columns) was used as a Diwān-i-‘Āmm in Old Delhi. See *Translation of Ibn-i-Batūta's travels*, by Muhammad Husain, Lahore 1898, p. 98. It does not seem improbable that the pillared Hypostyle Hall of Ancient Persia is the prototype of the 'Hall of Audience' so popular with the Mughals.

⁴ Manī, celebrated in Persia as a painter, is no other than Manes, the founder of the sect of the Manicheans. He had a book of drawings, it is said, which he showed to his followers as being a work given to him by angels.

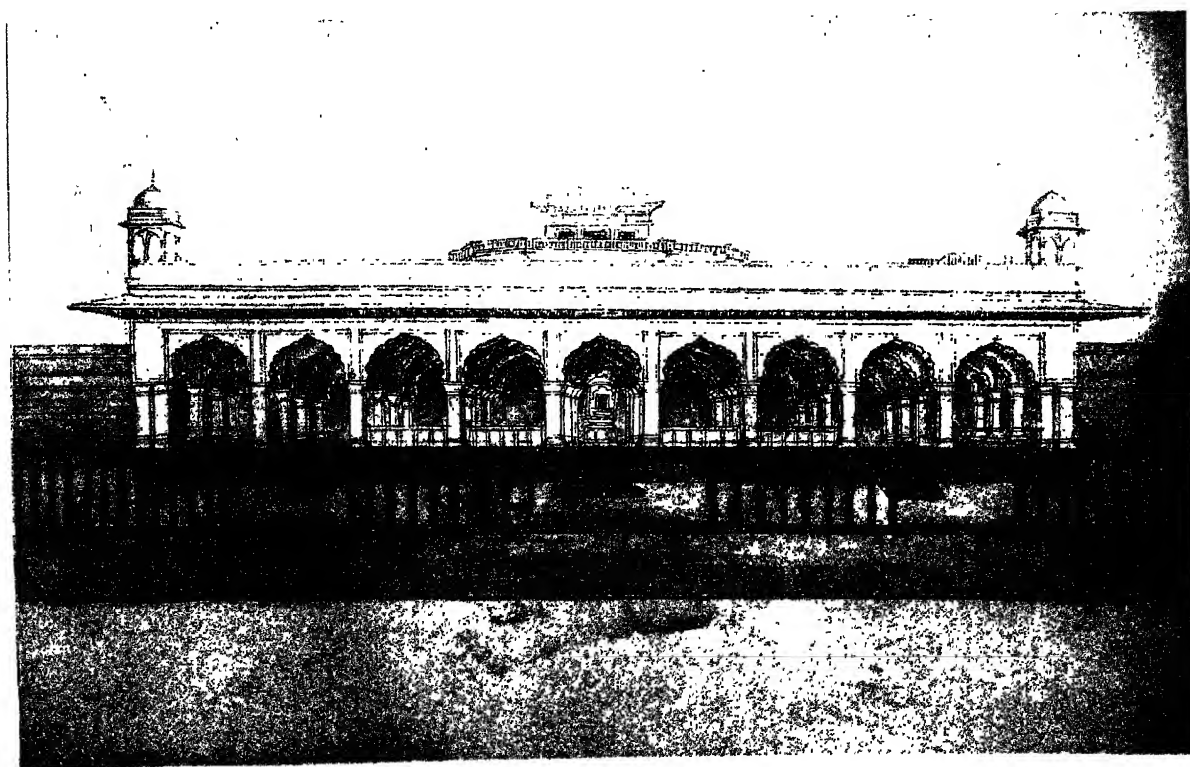
⁵ The Naqqār *khāna* or Naubat *khāna*.

⁶ *Amal-i-Sālih*, fols. 583-84.

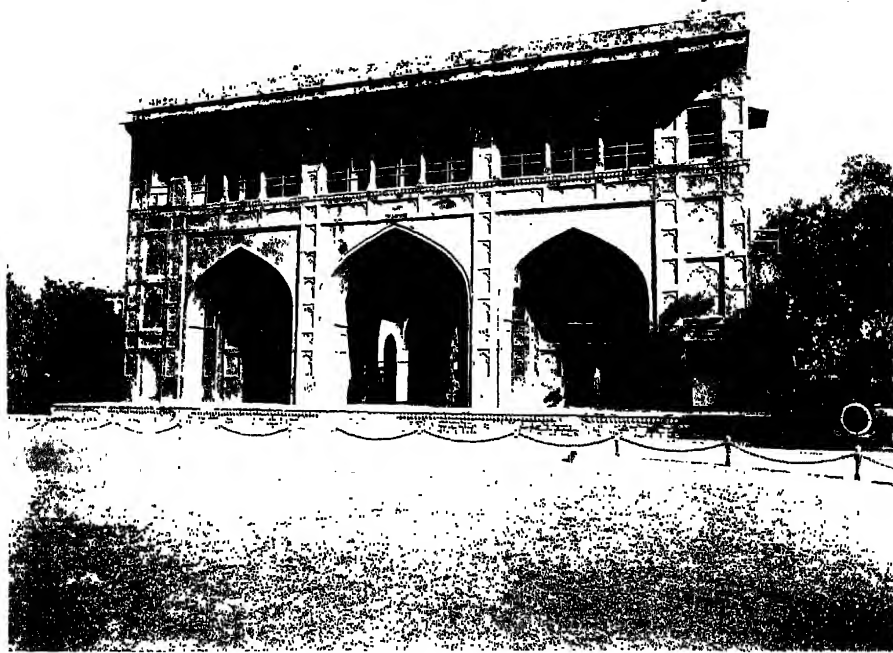
SHAH JAHAN'S FORT, DELHI.



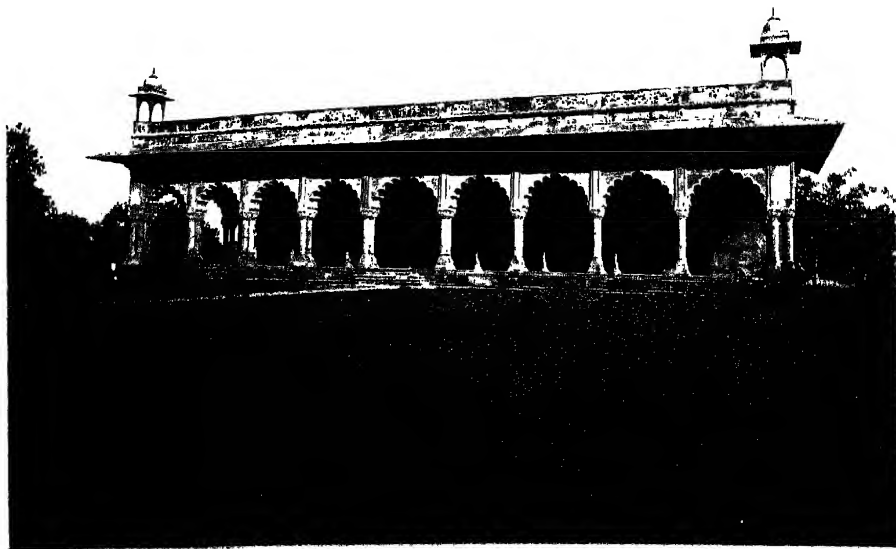
(Fig. 12.) AN OLD DRAWING OF THE DIWAN-I-KHASS.



(Fig. 13.) AN OLD DRAWING OF THE DIWAN-I-AMM, SHOWING THE RAILING IN FRONT AND THE TOP OF MIRZA BABAR'S HOUSE BEHIND.



(Fig. 14) THE NAQQAR KHANA, AFTER REMOVAL OF MODERN WALLS AND ACCRETIONS.



(Fig. 15.) THE DIWAN-I-AMM AND ITS COURTYARD, AS IT NOW APPEARS.

to the south is, unavoidably, nearer to the central pathway, owing to the impossibility of removing the military road which runs outside the new railing. Another shrubbery, running due north and south from the ends of the Diwān-i-‘Āmm, represents the buildings seen starting from the ends of the Diwān-i-‘Āmm in the old picture. (Plate IX, fig. 12.) These buildings screened off the private precincts of the palace from the public eye.

In the centre of this hall¹ stood the famous Peacock Throne (*Takht-i-Tāūs*), an excellent description of which is given in the *Bādshāh Nāmāh*.²

“ Since from time immemorial and year in, year out, various jewels of great price, each of them worthy to be an ear-ring for Venus and a belt for the sun, were kept in the Imperial Treasury ; early in the beneficent reign, it had occurred to the inspired mind [of the Emperor] that the collection of such rare presents and accumulation of so many precious things, was only meant for the adornment of the Empire, and to increase its ornamentation. Therefore they ought to be used in a place where spectators might enjoy the world-enlightening beauty of the produce of the ocean and the mine, and also they should be an added lustre to the Palace. Orders were issued that all kinds of rubies, diamonds, pearls and emeralds, the value of which was estimated at two hundred *lacs* of rupees, as well as those jewels in charge of the provincial treasury officers, should be brought for His Majesty’s inspection, excepting only the private jewels, kept in the jewel office of the heavenlike palace.

“ Great and valuable jewels, the weight of which was fifty thousand *mithqāls*³ and the price of which was eighty-six *lacs* of rupees, were selected and entrusted to Bebadal Khān,⁴ the Superintendent of the gold-smiths’ office, in order that the jewels might be studded in a slab made of one *lac* of *tolās* of pure gold, which is equal to two hundred and fifty thousand *mithqāls*, and the price of which was fourteen *lacs* of rupees. This slab was $3\frac{1}{4}$ *gaz* by $2\frac{1}{2}$ imperial *gaz* with a height of 5 *gaz*.

“ It was desired that the inside of the ceiling of the throne should be mostly enamelled, and the rest set with jewels, and that the outside should be adorned with rubies and other precious stones. It was to be supported by twelve emerald-coloured columns. Above the ceiling two images of peacocks set in bright gems were to be made, and between them was to be fixed a tree of rubies, diamonds, emeralds, and pearls. To ascend the throne three steps studded with beautiful gems were to be prepared.”

¹ *Ibidem*. This is in conflict with the assertion that the Peacock Throne stood in the Diwān-i-khāss. Carr Stephen says that the throne stood on the marble *takht* at present in the Diwān-i-khāss. Bernier describes the throne and in his description says, “ at the foot of the throne were assembled all the Omrahs in splendid apparel upon an estrade surrounded by a silver railing.” Later, he adds with reference to the court outside the building in which the throne stood ; “ as to the arcade galleries round the court every Omrah had received orders to decorate one of them at his own expense and there appeared a spirit of emulation who should best acquit himself to the Monarch’s satisfaction. Consequently all the arcades and galleries were covered from top to bottom with brocade and the pavements with rich carpets.” The courtyard of the Diwān-i-‘Āmm seems to be here referred to. Von Oelrich places the Peacock Throne in the Diwān-i-khāss : (See Von Oelrich, *Travels in India*, Vol. II, p. 24, translated by Lloyd. London, 1845). It is not unlikely that the throne was moved about as required.

² For a description of the Peacock Throne also see *Tavernier’s Travels in India*. Edited by V. Ball, Vol. I, pp. 381-4.

³ *Mithqāl* is a weight equal to $1\frac{1}{4}$ drams.

⁴ This mention of the officer to whom the work was entrusted shows that the statement of Mr. Beresford in his *Guide to Delhi*, that the Throne “ was planned and executed under the supervision of Austin de Boideaux (see Carr Stephen, *Archæology of Delhi*, p. 231) is not substantiated by native historians. For Bebadal Khān, vide *Maathirul-Umārā*, Vol. I, pp. 405-8.

"In the course of seven years this heaven-like throne was completed at the cost of one hundred *lacs* of rupees which is equal to three hundred and thirty-three thousand *tūmāns*¹ of "Irāq" and to four crores of *khān* current in Transoxiana. (*Māvarāu-u-Nahar*).

"Of the eleven slabs covered with jewels and erected round the throne for leaning against, the central one on which the Emperor, a Solomon in rank, leans, by placing on it his truth-seeking hand, was estimated at ten *lacs* of rupees. And of the jewels set in the throne, there was a ruby in the centre, valued at one *lac* of rupees, which *Shāh Abbas*,² king of Persia, had sent to his late Majesty 'as a present by the hand of Zambil Beg. His late Majesty had sent it by Allāmi Afzal *Khān* to the world conquering Emperor, His Majesty, the second Lord of the happy conjunction, as a reward for subduing the Deccan. At first, the sublime name of His Majesty, the Lord of happy conjunction,³ the pole star of the Faith and of Religion, and that of *Mirzā Shāh Rukh*, and *Mirzā Ulugh Beg*, were written over it. After some time it fell into *Shāh 'Abbās*' hand, who also put his name on it, and when it was received by his late Majesty, he added his own name with that of his illustrious father. Now it has received fresh light and brightness, and inestimable adornment from the exalted name of the King of the Seven climes, and the Emperor of throne and Crown."

The following poetry composed by *IIājī Muhammad Khān Qudsi*,⁴ the last line of which gives the date, was written by the order of the Emperor, on green enamelled work inside the throne:—

که سد سامان بنائند الهی	رهی مجده نعت ناساهی	1.
زر حورشد را نگداخت اول	فلک زوری که مگردش مکمل	2.
نمیدان کارش مبدای افلاک	نحکم کار درما صرف شد ناک	3.
وجود نیکوکار را حکمت ابن بود	حزائن نعت از زر گوهر چه معصوم	4.
لب لعل دندان را دن دعا ندست	رباوتش که در عدد نهانست	5.
گهر افسر سر خانم ندیده	برای ناله اس عمری کشیده	6.
که سد از گنج خالی کدست خاک	نکردش عالم از زر سد دندان ناک	7.
دهد حورسد و مه را زر نمادش	رساند گروفلک خود را بپادش	8.
رگر درون ناند در نحت افزون	سرافرازی که سر بردانه اس سود	9.
نداه عرش و کرسی ساه او	خراج نعت کان بردانه او	10.
خرای عالمی هردانه آن	رانواع حواهر گسده الوان	11.
مروزان چون خراج او طور سبنا	در اطرافش درد گلهای میدا	12.
نگدن خوشش جم بردانه اش دست	چو مگرد از فرازش کونهی دست	13.
بواند صد ملک را داد اخبر	سب بار او در زر لعل و گوهر	14.
ازان سد نایه پدرش ملک سای	دهد ساهجهان را نوسه برپای	15.
خراج عالمی را خرج نک نحت	کند ساهجهان نعت حوان نعت	16.

¹ *Tumān* a sum of money equal to 10,000 Arabic silver diachms (which are about one-third less than those of the Greeks) and equivalent to fifteen dollars and a half

² *Shāh 'Abbās II* of Persia (A. D. 1585-1628) A contemporary of the Emperor Jahāngir.

³ *Jannat Mahān*, a term used for Jahāngir after his death. It means literally "nestling in paradise"

⁴ He refers to *Timūr* who is called *Sahib Qirān*. Here the word *thām* is printed by mistake.

⁵ *Qudsi* is his poetical name. He was *Maliku-sh-Shu'arā* in *Shāh Jahān*'s time, and died in A. H. 1055. A. D. 1645). See *Biographical Dictionary*, T. W. Beale London 1894.

17. خدایند یکه عرش و کرسی افراخت نواد قدرتش تختی چنین ساخت
 18. اثر بانیست نا کون و مکان را بود برنخت جا شاه جهان را
 19. بود تختی چندن هر روز جایش خراج هفت کشور ربر بابش
 20. چو نارنجش ریان برسید از دل گفت اورنگ شاهنشاه عدل

Translation.

1. "How auspicious is the Imperial Throne.
 "Which has been made ready by Divine help
2. "On the day when heaven was completing it,
 "It first melted the gold of the sun.
3. "By the order of the Supervisor the enamel of heaven
 "Was altogether exhausted in enamelling it.
4. "What is the use of gold or of jewels but to decorate this throne.
 "It was the reason for existence of ocean and mine.
5. "On account of its ruby which is beyond the limitation of value,
 "The heart of the red-lipped beloved ones is uneasy.
6. "Crown with jewel on its head, and ring, with jewel in its eye,¹
 "Waited for long [in the hope that they] might be set in its leg
7. "The world had become so short of gold on account of its use [in the throne],
 "That the purse of the earth was empty of treasure.
8. "If the sky should succeed in reaching its foot,
 "It would offer to it the sun and moon as a gift when first seeing its face
9. "The august personage who rubbed his head with its base,
 "Had to add the heaven as a step to [approach] the throne
10. "The tribute of ocean and mine is its robe
 "The shadow of it, is [like] the shelter of the Divine Throne and Seat
11. "It is decorated with various jewels,
 "Every particle of which is a lamp to the world
12. "On its sides flowers of enamel,
 "Shed light like the lamp from Mount Sinai
13. "As his hand could not reach its height,
 "Jam tied the precious stone [of his ring] round its leg.
14. "A dark night, by the lustre of its rubies and pearls,
 "Can lend stars to a hundred skies.
15. "As it kisses the foot of *Shāh Jahān*,
 "So the foot of its rank rubs the heaven
16. "The bestower of the world, and the prosperous king,
 "Spends the tribute of the whole earth on one throne.
17. "God [only] who exalted the heavenly Throne and Seat,
 "Can make such a throne, through His Divine Power.
18. "As long as a trace remains of existence and space,
 "May *Shāh Jahān* continue to sit on the throne.
19. "May such a throne be his seat every day,
 "[May] the tribute of seven climes be under his foot.
20. "When the tongue asked the heart for its date,
 "It replied: 'throne of the Just Emperor.'²

¹ i.e., the socket for the jewel.

² *Bādshāh Nāmāh*, Vol. I, Part II, pp. 78-81. Also see *Maāthīru-ul-Umara*, Vol. I, pp. 405-408.

The Chronogram "*Aurang-i-Shāhanshāh-i-adil*" gives the date, A. H. 1044 (A. D. 1634).

Such was the Peacock Throne taken to Persia by Nādir Shāh in A. H. 1152¹ (A. D. 1736), and of which no drawings showing it in its original condition have as yet been found.²

Before quitting Shāh Jahān's Hall of Audience it remains to say something of the mosaics that have been repaired in the back and side walls of the recess behind the 'baldachino,' (Plates XI, fig 16) It has already been explained³ that restoration of this kind would not have been undertaken, had not the Diwān-i-'Amm, with its throne, been a building which would be used for the highest functions of state by the King or the Viceroy. In another article on the mosaics⁴ the Director General of Archæology has also discussed at length what had been done in the way of their restoration by Major Cole in 1882, and how greyish black

¹ Mirza Muhammad Mahdi, *Tarīkh-Jahān Nādir* p. 212 Als *Maāthir-i-Umra* Vol I, p. 108

² Lord Curzon (*Persia* Hon G. Curzon M.P. Vol I, pp. 317-322) gives an interesting account of the alleged Peacock throne at Teheran, and shows by comparing it with the throne described by Tavernier, as well as by the following evidence, that it was not the throne taken from Delhi by Nādir Shāh.

"In this dilemma but with the growing conviction that the modern Takht-i-Traus had a very bad connection, if any at all, with the plundered treasures of Delhi, I turned to contemporaneous records. I found in Mal'olm (?) that Nādir Shāh was so fond of the real Peacock Throne of the Great Mogul that he has an exact duplicate of it made in other jewels. This left two Peacock Thrones to be demolished between his death and the end of the last century, a catastrophe which in the anarchy and violence of those times would have been in itself no unlikely occurrence, but it left the Takht-i-Traus unexplained, as under no circumstances could the latter be described as a duplicate of Tavernier's original. Now, however, I came across a passage in Plessier's 'Khurasan' in which he mentions that an old Kurd told him in 1882 that 'when Nādir Shāh was murdered and his camp plundered, the Peacock Throne and tent of Pearls fell into our hands, and were torn in pieces and divided on the spot. Any Kurd might certainly have been trusted to handle such an object as the Peacock Throne in the unceremonious manner here described, and, assuming the veracity of this particular Kurd, I witnessed with some delight the disappearance of the real Peacock Throne on one of the two, from the scene.

"A phrase in Moiré's account had now set me thinking that the Takht-i-Traus at Teheran must be a modern structure after all.

"In the same passage which I have quoted in a footnote, he adds, 'it (i.e., the throne) is said to have cost 100,000 toman' (equivalent at the beginning of the century to about £100,000) (?) here in clearly implying that an account or tradition of its cost prevailed at Teheran, which was far more likely to be the case with a new than with an old fabric and which was extremely unlikely to have been the case with an object carried off in plunder from a remote country seventy years before. At this stage, accordingly, I referred my doubts for solution to Teheran itself, and after an interval of some weeks was interested and I may confess, rejoiced to hear, on the authority of the Grand Vizier and the former Minister for Foreign Affairs, (?) that, as I suspected, the Takht-i-Traus is not an Indian throne at all. It was constructed by Mohammed Hussein Khan, Sada'i (or High Priest) of Isfahan for Fath Ali Shah when the latter married an Isfahan young lady, whose popular sobriquet for some unexplained reason, was Traus Khanum or the Peacock lady. The King is further said to have been so much delighted with the throne, that it was made a remarkably prominent feature in the ceremonies that commonly ensue upon marriage. Here, therefore, at one fell swoop toppled down the whole of the brilliant hypothesis, which has sustained scores of writers, and provided material for pages of glowing rhetoric. From the same authorities I learned that the original Peacock throne of Nādir Shāh (i.e., the survivor of the two facsimiles) was discovered in a broken down and piecemeal condition by Agha Mohammed Khan, who extracted it along with many other of the conqueror's jewels by brutal torture from his blind grandson Shah Rukh at Meshed, and then had the recovered portions of it made up into the throne of modern shape and style which now stands at the end of the New Museum in the palace at Teheran and to which I have alluded in my description of that apartment. In this chain, therefore, as to be found the sole surviving remnants of the Great Mogul's Peacock Throne, and the wedding present of Fath Ali Shah must descend from the position which it has usurped in the narrative of every writer in this century, without exception, who has alluded to it."

³ *A. S. I. Annual*, 1906-07, p. 2

⁴ *A. S. I. Annual*, 1902-03, p. 26-27.

¹ History of Persia, Vol. II, p. 37

² I understand, however, that it is now valued at nearly £200,000

³ When I was in Teheran I had in vain asked the same questions of the custodian of the treasury, and of every Persian Official, whom I met, but without eliciting a satisfactory response

marble was then used instead of the original black Italian marble;¹ also, how the twelve panels which had gone to England after the Mutiny were brought back to India and refixed in their former position. The question of their date and style has also been remarked on. For the repair of the remaining broken and missing panels the services of Signor Menegatti, an Italian 'Mos aicista' of Florence, were specially engaged and the work begun in 1906 being finished early in 1909. Many of the panels which had been destroyed had been filled with painted plaster; this has been removed and the mosaics restored as far as possible in conformity with the old designs shown on various drawings procured from South Kensington and elsewhere. Many of the inlay stones were specially brought from Florence for the purpose. A great debt of gratitude is due to Lord Curzon for the generous donation he made personally towards this work.

A full description of the Rang Mahal has been given in a previous report.² Considerable conservation was, however, carried out in the building during 1911-12. The unsightly beams of the modern roof have been hidden by a plain white ceiling composed of asbestos sheeting; much of the floor has been relaid to its old levels; repairs have been effected to roof and *chajja*, while sandstone *jali* screens have been fixed in the openings that give light to the underground rooms, filled till recently by unsightly hollow bricks. All the walls were carefully examined for traces of old colour decoration, and such as was found justified the name the building bears, "the Palace of colour." It appears that gold was used profusely in the decoration of the main hall, while for the small rooms at the north and south end of the building glass ornamentation was freely introduced, but it is impossible to say what the colours surrounding it were. Many coats of white wash had to be carefully removed before the old decorated surface was reached.

The small tank with its cusped border which lies in the centre of the west front has been repaired. It should be added here that the marble basin brought from the Queen's garden has not been placed in this tank, as was suggested by the late Mr. Tucker in his note on the building. It is true that the basin is indicated in the old pictures as being in front of the Rang Mahal, but whether in the tank or not is difficult to say. Sayyid Ahmad says that 'in front of the central door towards the court there is a big tank of one piece of durable marble, into which a sheet of water, three *gaz* broad, falls from a height of one and a half *gaz*.' This certainly looks as if it was in the centre of the cusped tank when he saw it, but was that its original position? It is not likely that it would be so placed in front of 'the candle niches' so as completely to hide them. As there was this doubt with regard to its original position, the basin has been made the centre piece of the large tank in the Rang Mahal garden, where at all events it cannot be far from the position given to it by Sayyid Ahmad and the old pictures.

A lady writer who signs herself فاني پارکس (Fanny Parks), saw Delhi in 1838, and on her visit to "Hayat-ool Nissa Begam, aunt of the present and sister of the late

¹ I am informed by the Director General of the Geological Survey of India that true black marble is practically unknown in India, although a dark grey variety is found at Bhainslana in Rajputana.

² *A. S. I. Annual*, 1907-08, p. 23-30.

³ *Op. cit.*, p. 27-28.

King," she was shown the *Zanana*. Her description (from which the following is an extract) of the buildings occupied by the royal Harem, is interesting. "Having quitted the Palanquin they conducted me through such queer places, filled with women of all ages; the narrow passages were dirty and wet and an odd sort of entrance to the apartments of a princess! Her young adopted son, the heir apparent, took my hand, and conducted me over the apartments of the women. The ladies ran out to see the stranger; my guide pointed them all out by name, and I had an opportunity of seeing and conversing with almost all the Begams. A plainer set I have never beheld; the verandahs in which they principally appeared to live, and the passages between the apartments, were *mal propre*. The young prince led the way through different apartments of the palace and I was taken into a superb Hall;¹ formerly fountains played there; and the ceiling was painted and inlaid with gold. In this hall were three old women on *charpāis* (native beds), looking like hags; and over the marble floor, and in the place where fountains once played, was collected a quantity of offensive black water, as if from the drains of cook rooms. From a verandah, the young prince pointed out a bastion² in which the king was then asleep, and I quitted that part of the palace, fearing the talking of those who attended me, and the laughing of the children, might arouse His Majesty from his noonday slumbers." In another passage the writer says "that any man wishing to ascend the minarets of the Jama Masjid is obliged to send round to the Captain of the Palace, that the ladies may be apprised, and no veiled one may be beheld even from that distance."

Mumtaz Mahal.

Although not one of the most important buildings in the area the conservation of the Muntāz Mahal presented many difficulties. It was formerly one of the apartments of the Royal Ladies, but after the military occupation was converted first into a prison and finally into a Sergeant's mess. The interior of the building was mutilated and disfigured by modern walls and such additions as sinks and cisterns; its original roof and *chajja* had gone and over its walls, originally decorated with painting and glass-work, had been smeared numerous coats of the never failing whitewash. The building, in truth, presented a most forlorn appearance. It was suggested, however, by His Honour Sir Louis Dane, the Lieutenant-Governor of the Punjab, that it should be adapted to house the local museum of Archaeology, which it had been decided to augment by a further loan collection of antiquities, the whole to be on view at the time of the Coronation Darbar.

The work that has been done on this building must on no account be regarded as restoration, but as the conversion of an old building, so marred by modern additions and alterations as to be almost unreclaimable, into a building suited to a special purpose and in harmony with the other buildings which surround it. The old drawings and photographs of the building show it to have been white, and, like the neighbouring Rang Mahal, provided with the usual *chajja* and four corner *chattris*. An entire new roof was necessary, and this, with the *chajja*, has been reconstructed

¹ This was probably the Kang Mahal

² The Musamman Burj?

³ *Wanderings of a Pilgrim, with revelations of life in the Zenana*, فانی پارکس, Vol. II, p. 213-14. London 1850. Pelham Richardson, 23, Cornhill.

in its former position, details as to which came to light while dismantling the modern roof. Much of the floor has been picked up and relaid to its old level, while the large central marble screen on the East front has been repaired. The walls were carefully examined for old decoration, and what was found has been exposed to view and carefully preserved. In the east central room the decoration appears to have been of glass-work of somewhat similar character to that seen in the neighbouring Rang Mahal. The glazed teak screens in the arch openings were a necessity for the conversion of the building, the greater part of which was open to the air, into a museum, but they have been kept as far as possible in harmony with the rest of the building. As it now stands, the Mumtāz Mahal takes its place without shame amongst the other buildings in the area. It also went by the name of the 'Chōti Baithak' and is said to have been built as the counterpart (*jawāb*) of the *khwābgah* which was known as the 'Bari Baithak.' "Although this building was very fine, elegant, and beautiful," says Sayyid Ahmad, "yet it underwent alterations by the late Mirza Jahāngir Bahādur, which disfigured the style of Shāh Jahān's structure."¹ In the old photographs of the east wall of the Fort a good idea can be gained of the bastard architecture of the structures erected by the later Mughal Emperors side by side with the original buildings of the Fort.

The grass court in front of the Mumtāz Mahal has not yet been reduced to its original level, owing to there being lack of time before the Darbar for the extensive trenching required here. It will be noticed that the plinth of the building is still partially hidden, and, this, it is hoped, will be exposed ere long. Fragments of a marble tank were found buried in the centre of the west front through which, unfortunately, a modern water pipe had been laid. When this portion of the garden is dealt with, it may be possible to do something to expose the tank in question. Between the Rang Mahal and the Mumtāz Mahal trenching revealed an underground passage leading to a doorway in the outer wall of the Fort, which had apparently been bricked up by the Mughal builders themselves. This also remains to be explored.

The Naqqār² (or Naubat) *Khāna* (Plate X, fig. 14) was vacated by the Military authorities in 1904. Wooden partitions, shutters and modern brickwork, have, since then, been removed from its arches, the northern face of the gateway repaired, and the stair-case at this side made accessible. Other modern excrescences, such as iron water-pipes, door and window-frames, have been taken away, and a large quantity of whitewash scraped off. The ground floor of the building served as the Delhi Museum of Archæology from 1909 till the spring of 1911, when the collection was transferred to more commodious quarters in the Mumtāz Mahal. A colonnaded square or *chawk* or *jilau khāna*³ formerly existed in front of the Naqqar Khāna, measuring 200 *gaz* by 140 *gaz*, while from it and running to the north and south gates of the Fort was a colonnaded street, occupied by stables and workshops,

¹ '*Āthār-u-s-Sanādīd*, Cawnpore 1904, Chap. 11, pp. 37-38.

² So-called, as drums were beaten here daily to announce the presence of the Emperor.

³ *Jilau Khāna*. An assembly place for the retinue in front of the palace. Another of the reasons for the transference of the Capital from Agra was "that the *jilau khāna* which is essential, was not yet built. See '*Amal-i-Salih*, fols. 575-76.

and served with water by the same canal (*Nahr-i-Bahisht*), which supplied the more important quarters of the palace with water.¹ In the centre of this square was a tank near which after five days' captivity, forty-nine Europeans taken by the mutineers in Delhi were put to death.

The covered
Arcade leading
from the Lahore
Gate:

The upper floor of the covered arcade leading from the Lahore Gate to opposite the Naubat *khāna* was, until 1911, occupied by the Military menial staff, and its arches had been blocked up to form quarters for them. These have now been removed with good effect (Plate XI, fig. 17). The whole of the interior was formerly decorated, the walls of the central open portion being covered with painting in floral designs, but the arcades themselves do not appear to have been so elaborately adorned, while the ceiling appears to have been white. The arcade is referred to by Muhammad Sālih as the *bāzār-i-Mussaqqaf* (covered Bazar), evidently so-called from the occupation of its bays by merchants. The central octagonal portion which is open to the sky was known as the '*chhātar manzil*,' (umbrella hall ?). The historian says that "a building like this vaulted market had never been seen before by the people of India, and that it was a new idea of the Emperor, who takes much interest in the construction of buildings."²

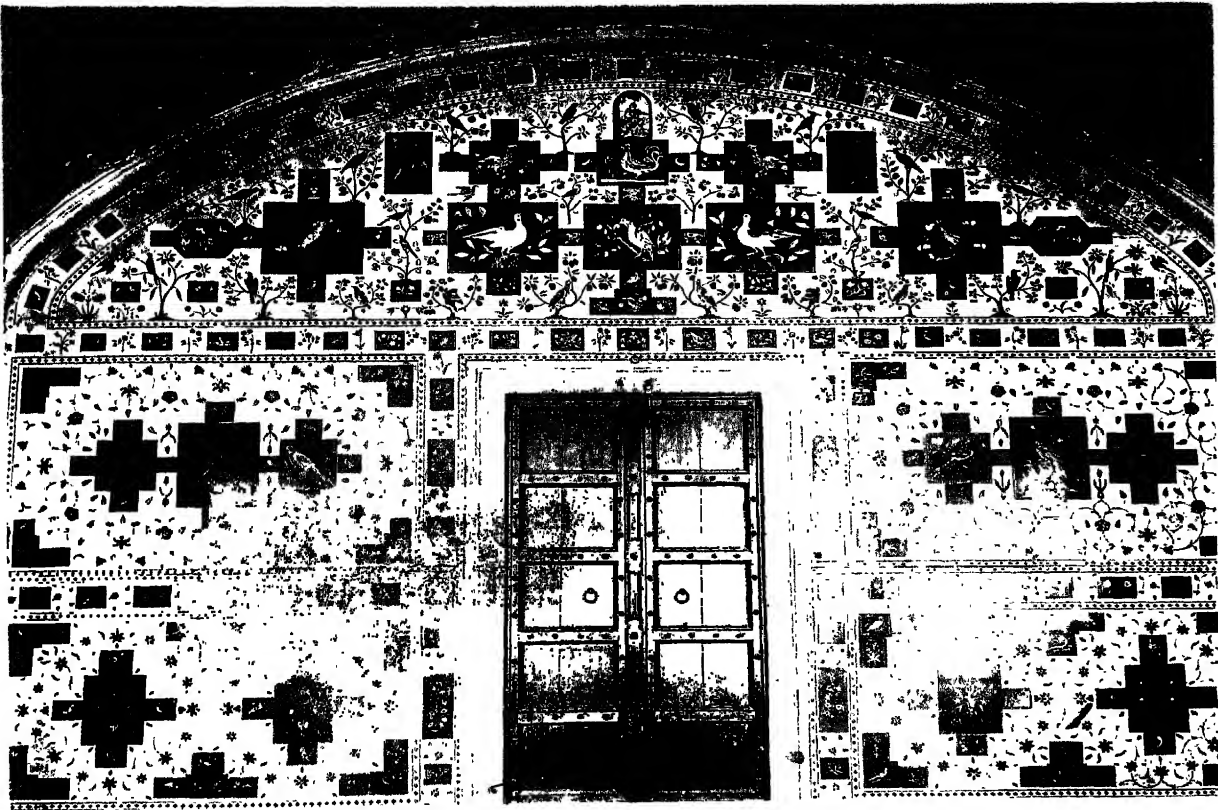
The New Water
Installation.

The new water installation, besides providing for the irrigation of the garden and shrubberies, enables the channels of the *Ḥayāt Bakhsh* garden and the Zafar Mahal tank to be filled. It also provides for the working of the fountains in the Zafar Mahal tank and the main channels running from the *Sāwan* to the *Blādon* pavilions, and for the cascades in these two last and in the *Shāh Burj*. The marble channel from the *Ḥammām* to the south end of the Rang Mahal can also be provided with water, as formerly, while a fountain head has been fixed in the marble basin in front of the Rang Mahal. The amount of water required to operate the fountains and cascades and to fill the tanks and channels at the same time is very considerable, and continuous pumping for about two weeks was necessary at the time of the Darbar. The Military objected to the water standing in the garden for sanitary reasons, unless it was covered with kerosine to prevent the breeding of mosquitoes, and they also forbade the disposal of the water on the ground below the Fort. A scheme therefore has been prepared by which the water can be raised into the tanks again and so re-used. However, the removal of certain of the military barracks to the immediate west of the *Ḥayāt Bakhsh* garden has recently been hinted at, so it is hoped that these difficulties may eventually be overcome and the fountains and tanks permanently provided with water during the cold season, and not for big ceremonial occasions only. The additional charm which the sheets of water give to the buildings and gardens cannot be overestimated. Here, as in the Fort at Agra, the old Mughal wells have been re-used, and pumps have been fixed in them; the channel, also, which empties the Zafar Mahal tank, is the old one. One pump is fixed in a large well, evidently of much older date than *Shāh Jahān's* buildings, which lies to the west of the *Ḥayāt Bakhsh* garden. The other two pumps are fixed in the wells in the *Ḥayāt Bakhsh* garden. That to

¹ Op. cit., fols. 533-84.

² '*Amal-i-Salikh*', fols. 533-84.

SHAH JAHAN'S FORT, DELHI.



(Fig. 16.) THE THRONE OF SHAH JAHAN
VIEW OF BACK WALL SHOWING THE OLD PLAQUES REPLACED.



(Fig. 17.) THE ARCADE BETWEEN THE LAHORE GATE AND THE NAUBAT KHANA.
AFTER REMOVAL OF MODERN PARTITIONS IN UPPER STOREY
AND CREATION OF ALCOVES.

the North-East of the Mōti Masjid bears an inscription which gives the date of its construction as 1256 A. H. (1840 A. D.), and states that it is the work of Bahādur Shāh II.

The history of the canal by which Shāh Jahān brought water to the Fort from a point thirty *kos* higher up the river¹ is of no little interest and is thus traced by the author of the *Māthīru-l-Umārā*. To the canal he gave the name Nahr-i-Bahisht² (canal of Paradise). It is said that it was originally the work of Fīroz Shāh Khiljī in A. H. 691. (1291 A. D.) and that he brought the canal from the Jamna near Khizrābād to Sufaidūn,³ his hunting ground, a distance of 30 *kos*⁴ from its starting point.⁵ After his death it became dry but was cleared by Shihābu-d-Dīn Ahmad Khān, Governor of Delhi in the time of Akbar. He brought the water to his own estate in A. H. 969 (1561 A. D.), and called it 'Nahr-i-Shihāb' after himself. It again became neglected, but in A. H. 1048 (1638 A. D.), Shāh Jahān issued orders for its clearance as far as Sufaidun and that it should be brought thence to his new Fort. On the completion of the citadel it was made to run through the palaces and city as well.⁶ Sayyid Ahmad, in his description, also mentions that, "it had become dry again, but that in A. H. 1236 (1820 A. D.), it was repaired, and cleared by order of the Government, and from that time it continues to run for the common benefit."⁷

¹ *Maāthīru-l-Umārā*, Vol. III, p. 466, also see *Āthāru-ṣ-Sanādīd*, Cawnpore 1904, Chap. II, p. 54.

² See also *Amāl-i-Sālīh*, Fol. 579.

³ Sufaidun is shown on the map about 65 miles N. E. by N. of Delhi, in Jind State.

⁴ This distance was marked along the Mughal highways by *Kos minars*. These are masonry towers averaging from 10' 0" to 50' 0" in height. The distances between them vary. In the case of consecutive *minars* near Agra the distance between the first and second was found to be 2 miles 3 furlongs and 330 feet, and between the second and third, 2 miles 4 furlongs and 330 feet. The *kos* may therefore be calculated as equal to approximately 2½ miles.

⁵ Khizrabad is 3 miles due west of Tajawala; the present head of the canal being a mile N. E. of Tajawala.

⁶ *Maāthīru-l-Umārā* Bibl. Ind., Vol. III pp. 465-66. See also *Āthāru-ṣ-Sanādīd*, Cawnpore 1904, Chap. II, pp. 53-54.

⁷ The chronology of the canal now known as the Western Jumna canal with its dependent branches serving Ambala, Karnal, Hissar, Rohtak, Delhi and parts of the native states of Patiala, Jind and Bikanir is given as follows in *History and Description of Government canals in the Punjab and North-West Frontier Provinces*, by Mr. J. J. Hatten. Lahore, Punjab Government Press, pp. 1-3.

A. D. 1351 The Emperor Fīroz Shah utilised the Chautang Naddi to conduct water to Hansi and Hissar.

About A. D. 1468. Water ceased to flow beyond the lands of Kaithal near Karnal.

A. D. 1568. The Emperor Akbar re-excavated the work of Fīroz and brought a supply from the river Jumna and the Somb into the Chautang and on to Hansi and Hissar. A valuable *sanād* by Akbar on this work exists.

About A. D. 1626, Ali Mardan, the famous engineer of the Emperor Shah Jahan, drew a canal to Delhi, first by way of Gohana along a natural depression now occupied by a Main Drain, and when this failed by way of Panipat and Sonipat. The cost of this work is reported to have been very great, and considerable engineering skill was shown.

A. D. 1707. Water ceased to reach Hariana (Hansi-Hissar).

1740. Flow ceased at Safidon on Fīroz Shah's line.

1753-60. Delhi branch ceased to flow, owing to political disturbances, and the difficulties experienced in efficient maintenance especially at the head.

1810. First surveys made by the British Government for a restoration of the Delhi Branch.

1817. Captain Blain appointed to restore the Delhi Branch.

1819. Delhi Branch reopened.

1820. Water once more entered Delhi.

1823. Restoration of the Hansi Branch (Fīroz's) began.

1825. Hansi Branch reopened, etc., etc.

Of the earlier schemes little need be said. Fīroz Shah's Canal, by which the Hansi Branch below Datrat was known, was little more than a monsoon supply channel which was led down a drainage bed to the tanks at Hansi and Hissar, the royal residences.

Elephant Statues.

An account of the elephant statues which stood in front of the Delhi gate, and their reconstruction under Lord Curzon's orders in 1903, has been given by Dr. J. H. Marshall in a previous report.¹ Seen by Bernier in the beginning of Aurangzeb's reign,² they were destroyed by that Emperor, as is related by his contemporary historian in the following passage :—

“ According to the tenets of the Muhammadan Law, and in pursuance of his determination to abolish *heresy*, the Emperor ordered the removal of the life-size statues of the two stone elephants, which were set up on either side of the gate of the fort, hence called *Hathya Pol* [Elephant gate] and which had been made by skilful artists.”³

As Dr. Marshall has pointed out, certain writers have attempted to locate these elephants elsewhere, and it is curious, that Sayyid Ahmad in his first edition⁴ refers to the statues as having been in front of the Delhi gate and in his second edition⁵ places them before the Naqqār Khāna. Muhammad Sālih's notice of these statues is particularly interesting as a contemporary reference ; though in some points it is difficult to understand, as it apparently implies the existence of two sets of statues. The original text and its translation are as follows :—

دندش هر کدام دروازه قلعه متصل بازار مذکور بر دروازه جانب اکبر آباد دو نمال میل سانه دار
نعمان کلانی که فرد اعظم ابن نوع می ناسد ساخته السجان صورت درست هیئت تمام معانی برآورده اند
که بطر هر یک از آن چهار نفس بدیع در دهن صرر اکبر چه جایی خارج ارهام صورت اندر رومع ندراندند

“ Before each of the doors of the fort, [namely the one] adjacent to the said Bāzār, [and] the gate towards Akbarābād [*i.e.*, Agra] two shade-giving statues of elephants, of such a size that they may be the highest of their kind, have been built. So correct in form and perfect in every way in appearance have they been built, that

Akbar's Canal was undoubtedly a perennial channel. The two ancient bridges at Kinnal and Sahdon testify to this, and there is no reason to doubt the genuineness of the Sanad by Akbar, which is dated Shawāl A. H. 978, Ferozpur, where Akbar was at the time. This Sanad clearly states that the water was to be obtainable “all the year round.” The existence of a complete system of watercourses points to the same fact. No such watercourses existed in the channel brought down by Firoz.

Ali Mardan Khan's canal was indeed a great engineering undertaking. The river supply coming down the right branch of the Jumna was bunded up annually at Fatehgarh near Dadupur, about 14 miles below Tajawala. The line followed was the drainage at the foot of the high land (*bangar*) of the right bank. Several cuts through high land had to be made. Drainage and escapes were fairly provided for. The “Poolchadda” aqueduct near Delhi, taking the canal over the Najafgarh Jhil Drain and acting at the same time as a waste weir, was a great engineering feat at the time. The total length of the aqueduct is 80'; thickness of canal floor 3½'; waterway 16' at bed and 19' at top of parapets which were 5'—9' high—all carried on massive 8' thick piers, with cut waters and arches 8' span over the drainage. This work was retained by the British Government with slight modifications, when the branch was opened to Delhi in 1820. The water rate appears to have been regulated by the time that the outlets remained open. It is stated that 1,000 armed peons and 500 horse were maintained on the establishment. The net revenue from the Canals was reckoned equal to the maintenance of 12,000 horse.”

Further information on the history of the Canal of Ali Mardan Khan will be found in *Memoranda on the Western Jumna Canals, North-Western Provinces*, 1849, by Major W. E. Baker, Superintendent of Canals, North-Western Provinces London 1849. In it are also given drawings of several of the old Mughal aqueducts. The Poolchadda aqueduct is no longer used and lies close to the modern Najafgarh jhil aqueduct just outside Delhi.

¹ *A. S. I. Annual*, 1905-1906, pp. 33-42.

² Bernier, *Voyages* (Constable), p. 256.

³ Muhammad Sāqī Mustafid Khān. *Muāthir-i-Ālamgarī*, p. 77. See also *Āthār-u-Ṣanādīd*. Cawnpore 1904, Chapter II. p. 31.

⁴ *Āthār-u-Ṣanādīd*, Lucknow 1876, Chap. II, p. 5.

⁵ *Op cit.*, Cawnpore 1904, Chap. II.

the like of these four rare effigies cannot be conceived in the form creating mind ; then how much more wonderful is it that they actually exist.”¹

There is another interesting reference to the statues in a satirical poem composed by N'imat Khān 'Āli,² comptroller of Aurangzeb's kitchen, in mockery of a certain Anni Rāi, who seems to have been a Pay-Master General (*Bakhshī-i-Mulk*). The text and its translation run as follows :

ان صورت مهارت فبالا هدبا پرل مارا جه فدل بند حساب ر کناب کرد

“ Why has this man, like in appearance to the *mahaut* of the elephants at the Hathya Pol, stopped our pay ? ”³

In substantiation of Dr. Marshall's statement “ that it was the fashion at one time to set up elephant statues at one or other of the gates of every important fortress ”⁴ those in the Fort at Bikanir may be instanced. They are known as Jaimal and Patta.

GORDON SANDERSON.

¹ *Amāl-i-Sālih*, fol. 584.

² N'imat Khān 'Āli. See *Oriental Biographical Dictionary*, Beale, Calcutta 1881, p. 203

³ *Waqāya-i-N'imat Khān 'Āli* Lucknow 1893, p. 41.

⁴ *A. S. I. Annual*, 1905-1906, p. 41.

ARCHÆOLOGICAL REPORT, 1911-12.

EXPENDITURE ON HISTORICAL BUILDINGS, DELHI
FORT, SINCE 1883-1884.

									Rs.	A.	P.
1883-1884	.	.	.	.	.	.	.	.	2,226	0	0
1884-1885	.	.	.	.	.	.	.	.	6,542	0	0
1885-1886	.	.	.	.	.	.	.	.	599	0	0
1886-1887	.	.	.	.	.	.	.	.	8,037	0	0
1887-1888	.	.	.	.	.	.	.	.	4,645	0	0
1888-1889	.	.	.	.	.	.	.	.	Figures not available.		
1889-1890	.	.	.	.	.	.	.	.	"	"	"
1890-1891	.	.	.	.	.	.	.	.	3,519	0	0
1891-1892	.	.	.	.	.	.	.	.	1,230	0	0
1892-1893	.	.	.	.	.	.	.	.	1,350	0	0
1893-1894	.	.	.	.	.	.	.	.	1,659	0	0
1894-1895	.	.	.	.	.	.	.	.	525	0	0
1895-1896	.	.	.	.	.	.	.	.	731	0	0
1896-1897	.	.	.	.	.	.	.	.	517	0	0
1897-1898	.	.	.	.	.	.	.	.	1,760	0	0
1898-1899	.	.	.	.	.	.	.	.	Figures not available.		
1899-1900	.	.	.	.	.	.	.	.	"	"	"
1900-1901	.	.	.	.	.	.	.	.	513	0	0
1901-1902	.	.	.	.	.	.	.	.	509	0	0
1902-1903	.	.	.	.	.	.	.	.	700	0	0
1903-1904	.	.	.	.	.	.	.	.	19,123	0	0
1904-1905	.	.	.	.	.	.	.	.	10,452	0	0
1905-1906	.	.	.	.	.	.	.	.	26,663	0	0
1906-1907	.	.	.	.	.	.	.	.	8,106	0	0
1907-1908	.	.	.	.	.	.	.	.	10,201	0	0
1908-1909	.	.	.	.	.	.	.	.	34,813	0	0
1909-1910	.	.	.	.	.	.	.	.	20,092	0	0
1910-1911	.	.	.	.	.	.	.	.	26,948	0	0
1911-1912	.	.	.	.	.	.	.	.	81,240	0	0
GRAND TOTAL									2,73,060	0	0

The amounts prior to 1903-1904 include petty annual repairs. After 1903-1904 petty annual repairs are not included. There is an annual grant of Rs. 2,000 for Delhi buildings. Out of this amount staff (*chowkidars*, sweepers, etc.) is also paid for.

EXCAVATIONS AT BHĪṬĀ.

THE ancient remains at Bhīṭā, near Allāhābād, were first made known by Gen. Cunningham, who visited the site in 1872, and gave, in his report¹ for that year, a descriptive account of its location and general features. Bhīṭā was identified by Gen. Cunningham with the old Bitbhaya-pattana, a town mentioned in the Vira Charitra as having flourished in the days of Mahāvīra, and, to suit this identification, the name of the village was given in his reports as Bithā. There can be no question, however, that the correct spelling, according to the local pronunciation, is Bhīṭā—a name which the village has very naturally derived from its situation on an ancient mound and which is common to many another village of Northern India in a similar situation; while, as to the original name of the place there is good reason to suppose, as we shall presently see, that it was Vichhī or Vichhīgrāma.

Besides some fragmentary sculptures belonging to a *tōraṇa* and railing of the Śunga period, Gen. Cunningham collected several short inscriptions, said to have been found at Bhīṭā or the neighbouring Deoriyā, and from these records he concluded that Buddhism was the prevailing religion at Bhīṭā “during the period immediately following the Indo-Scythian rule in North-West India.”² This conclusion was, no doubt, reasonable enough in the light of the limited evidence then available; it is not, however, borne out by the results of my recent excavations, which, so far as the period referred to is concerned, yielded cult objects mainly of a Brahmanical character.

Gen. Cunningham also made an effort to examine the defences of the old town, and for this purpose cut a section through the rampart on the south-east side of the chief mound, or the *garh*, as it is now locally known, revealing there a small portion of the old city wall. To this discovery and to the conclusions to which it led Gen. Cunningham, I shall revert again when speaking of the fortifications at the end of the Bastion Street.

In the following description of my excavations, I shall start with the largest group of structures near the gate in the south-east wall of the town, and will proceed afterwards to deal with the smaller detached groups towards the north and north-west.

¹ *A. S. R.*, Vol. III, pp. 46—52.

² *Loc. cit.*, p. 47.

Buildings 3 and 4.

Of the entrance itself and its flanking defences few traces now remain, and it is impossible to reconstruct its plan with any degree of certainty. It seems probable, however, that it was not unlike the approaches to later Indian fortresses, where instead of a single gate, there were two or three, with guard-rooms attached disposed at intervals along the roadway, which ran between high flanking walls. In the Mauryan period the buildings III and IV, which face each other on opposite sides of the road, probably did duty as guard-houses or were closely connected in some other way with the defences; for their construction is much more massive than that of the private houses of the period. The foundations of these buildings start from a depth of 4 feet below the concrete surface in the roadway between them, and are composed of bricks measuring $20'' \times 12''$ to $13\frac{1}{4}'' \times 2\frac{1}{2}''$ to 3 with several courses of unbaked brick below, the face of the foundations being protected by layers of *kankar* alternating with pounded potsherds, and their corners further strengthened by massive stones laid against them on the outside.¹ Where there was relatively little superincumbent weight, i.e. below the doorways of the buildings, the foundations were not carried down so deep. In the Gupta epoch a side street was taken over the N. W. end of building III, which by then had been reduced to its foundations, and about the same time the superstructure of the remainder must have been rebuilt, the small bricks or brickbats used in the reconstruction being characteristic of that period.

To the Gupta epoch also belong some ponderous and roughly cut blocks of stone which were found in the roadway some 2' or 3' above the level of the Mauryan road. In two of these blocks were massive iron rings which appear to have been used as sockets for the doors of a gate to swing in. On another block was found the name *Karmamishra* carved in Gupta characters. It is noteworthy that in the main thoroughfares both at this point and elsewhere the accumulation of debris was much less rapid than in the houses adjoining, the thoroughfares themselves being kept clear for traffic. Thus the average rate of accumulation in the roads was hardly 6' in a century, whereas in the houses it was at least treble as much.

Buildings 1 and 2.

The remains of structures I and II, on either side of the road as one enters the town, also belong to the Gupta period. They are of poor construction and now so mutilated, that it is impossible to restore their plan. It seems manifest, however, that they could not have formed part of the defences, and it may be surmised that they were shops placed between the inner and outer gates.

Between these two buildings and in the middle of the road are the remains of a low wall composed of bricks measuring $18'' \times 9'' \times 3''$ with a floor on its N. E. side, of *kachcha* brick spread over with concrete. This floor is about 4' below the floor of the Mauryan buildings III, IV and V and is probably long antecedent to them. It seems to be approximately contemporary with a concrete floor which was found to the S. W. of building IV on about the same level. The concrete in both cases is composed of *kankar* and very small potsherds, and has not the compactness or hardness of the concrete in the trench between XII and XXII described below.

Building 7.

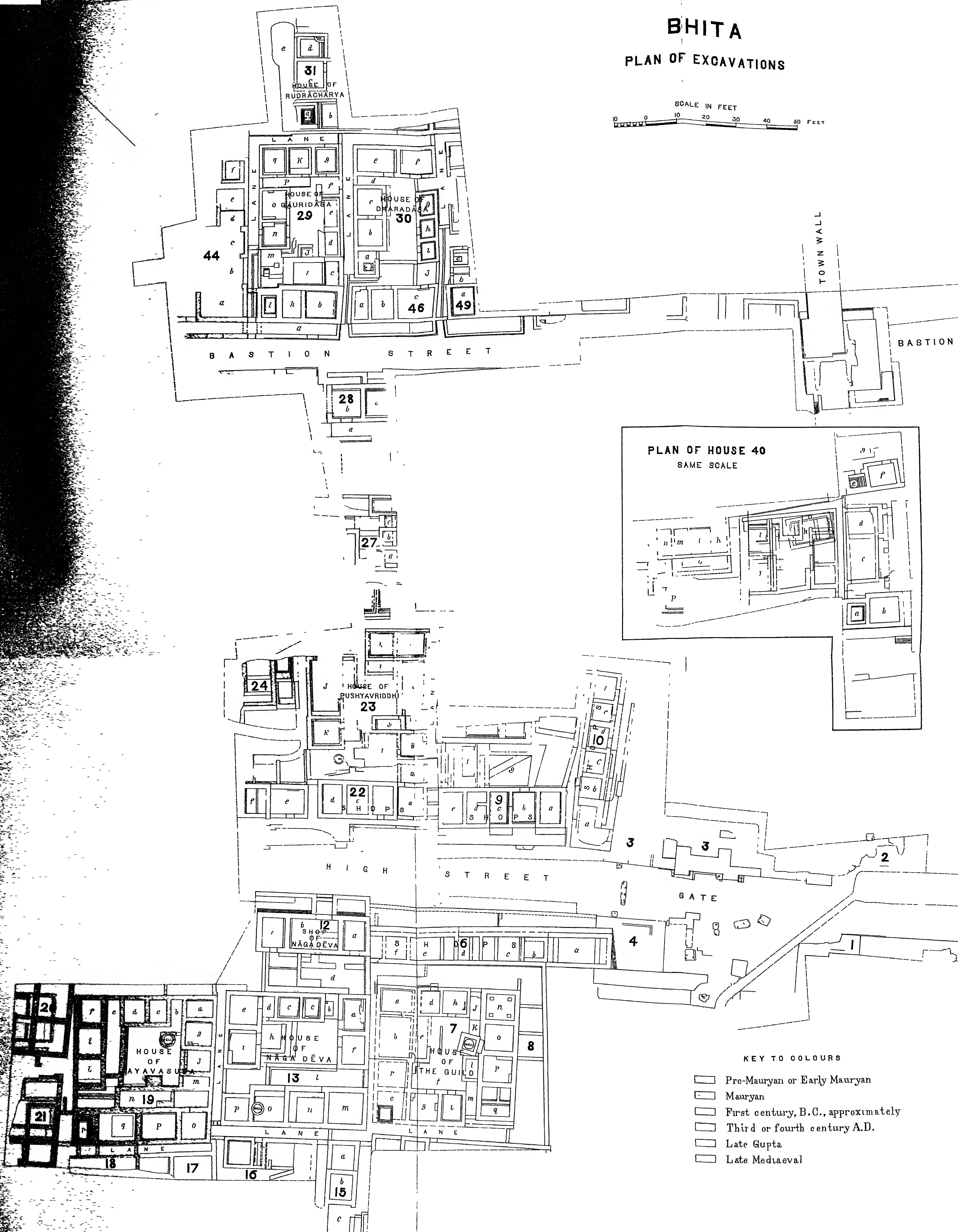
Of the group of buildings to the left of this road as one enters the town the earliest complete structure is the *House of the Guild*,¹ which I have ventured so

¹ Similar foundations were met with in building XI.

BHITA

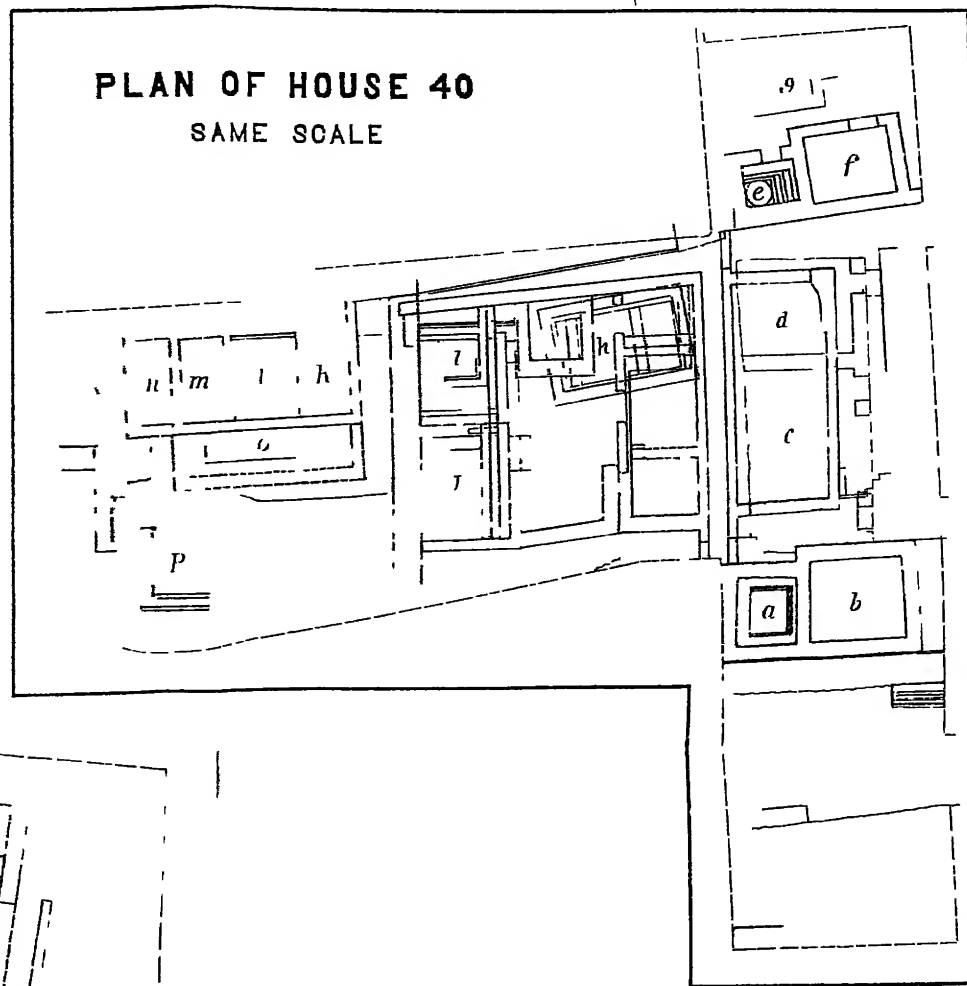
PLAN OF EXCAVATIONS

SCALE IN FEET
0 10 20 30 40 50 FEET



PLAN OF HOUSE 40

SAME SCALE



KEY TO COLOURS

- Pre-Mauryan or Early Mauryan
- Mauryan
- First century, B.C., approximately
- Third or fourth century A.D.
- Late Gupta
- Late Mediaeval

to name from a seal-die of terra-cotta found beneath the floor level of room *O*.¹ The legend on this die appears to read *Sahijitiye nigamasa*, in letters of the 3rd or, perhaps 4th century B.C. Probably it was buried by chance when the foundations of the house were being laid, but, whether this was so or not, the house must on other grounds be assigned to the Mauryan epoch. The plan of the building is simple. It consists of an open rectangular courtyard in the centre, with twelve rooms disposed around it on the four sides, access to the courtyard being obtained through two entrances, *J* and *M*, facing each other on opposite sides of the building. In front of the chamber *B* is what appears to have been a verandah, while in front of the room *P* is a later addition, intended perhaps to screen off the door. The resemblance of the plan of this house, and of others also which I shall presently describe, to that of the old Buddhist Monasteries² is patent, and it may be taken for granted, I think, that the latter were copied from this type of domestic house. As regards construction, all the houses of the Mauryan and later periods have their superstructures built of kiln-burnt bricks, *kachcha* bricks being reserved in a few of the earliest buildings only for the lower part of the foundations. In the *House of the Guild* the walls of the rooms on the S. E. side descend some two feet lower than those on the other three sides and their bricks are laid as headers instead of stretchers.³ This greater thickness and stability were, I presume, given to the walls on this side of the house in order that they might carry a second storey; for the same phenomenon is observable in other buildings on this site, and it is well known that upper stories were in vogue at that period.

The *House of the Guild* does not appear to have stood for any great length of time, or to have been rebuilt when once it had fallen to ruin. That its remains had vanished from sight by the end of the 3rd century A. D., is proved by the position and orientation of the well at the side of the courtyard built about that time; but it is probable that the house had been destroyed long before then, *viz.*, about the time when the neighbouring house of Nāgadēva was being erected. I conclude this from the fact that the antiquities found in the débris above the floor level, which may be assumed to have been left there when or soon after the house was deserted, belong to the first century B. C., and are contemporary with those discovered in the foundations of the house of Nāgadēva. Moreover, it will be seen from the plan on Plate II that at that time a circuit wall was put up around the area occupied by the *House of the Guild*, and it seems likely that the remains of the house were then levelled up and the site converted into an open courtyard or garden attached to the house of Nāgadēva.

The interior of the rooms and courtyard were excavated to a considerable depth below the floor level, but only a few objects of terracotta were found. These include the seal-die referred to above (S. I), the torso of a female figurine (T. 11), a

¹ I have attached this name to the house for the sake of distinction, though the seal is probably somewhat older than the house. In the case of other houses there is reason to suppose that the names given to them were the names of their actual occupiers.

² Quotation from C. F. Foucher.

³ The bricks of the chambers on the south-east side average $18\frac{1}{2}' \times 9'' \times 2\frac{1}{2}''$, while in the rest of the house they average $21'' \times 10\frac{1}{2}'' \times 2\frac{1}{2}''$. The two sizes were no doubt used at one and the same time for purposes of economy.

primitive vessel modelled in human shape (T. 12) and the wheel of a toy cart (T. 8). The last-mentioned came from a depth of some 7 feet below the foundations of the house, and, to judge from the deposits above it, can hardly be assigned to a later date than the sixth century B.C., and may be considerably earlier. The other three objects are probably but little older than the house itself.

Of the antiquities found on the floor level of the house and belonging, as stated above, to the first century B. C., the most noteworthy were:— (a) Two wheels of a terracotta toy cart, minutely decorated on the outside with spokes, rosettes, and floral ornaments in the characteristic style of the time (T. 27-8). Many other remnants of similar carts and their riders were found in other buildings, and from them it is easy to restore these little toys, so interesting in connexion with the well-known play of the *Mrichchhakatikā*. Usually, they were fashioned like tricycles the rider between the two front wheels being sometimes a man or woman, sometimes an animal, while in one case the four horses themselves of the chariot are represented in relief.¹ (b) Three caskets of finely veined steatite, found on the floor level of the passage *M*. (St. 40, 41, 43.) One of them is spherical and the other two round, with a flat base and lid. All are turned on the lathe, and the spherical casket, unfortunately incomplete, is of singularly fine workmanship. These caskets no doubt, like the Greek *pyxis*, did duty in the ordinary way as jewel or toilet boxes, and were adapted by the Buddhists as convenient receptacles for the sacred relics deposited in their *stūpas*. (c) Half of a stone grinding stool, decorated with two winged lions rampant.

From the débris above the floor came, among other objects, a small *āyāgapatta* slab of green slate, belonging to the Kushāṇa period (St. 32), two clay sealings inscribed in characters of the same age, and a number of other sealings dating from the 2nd or 3rd century A.D.² onwards. Among the latter two are of especial interest as furnishing new names of rulers, connected, apparently, with the Āndhra line of kings, namely Mahārāja Gautamiputra Śivamēgha and Rājā Vasishthiputra Bhīmasēna.

Building 6.

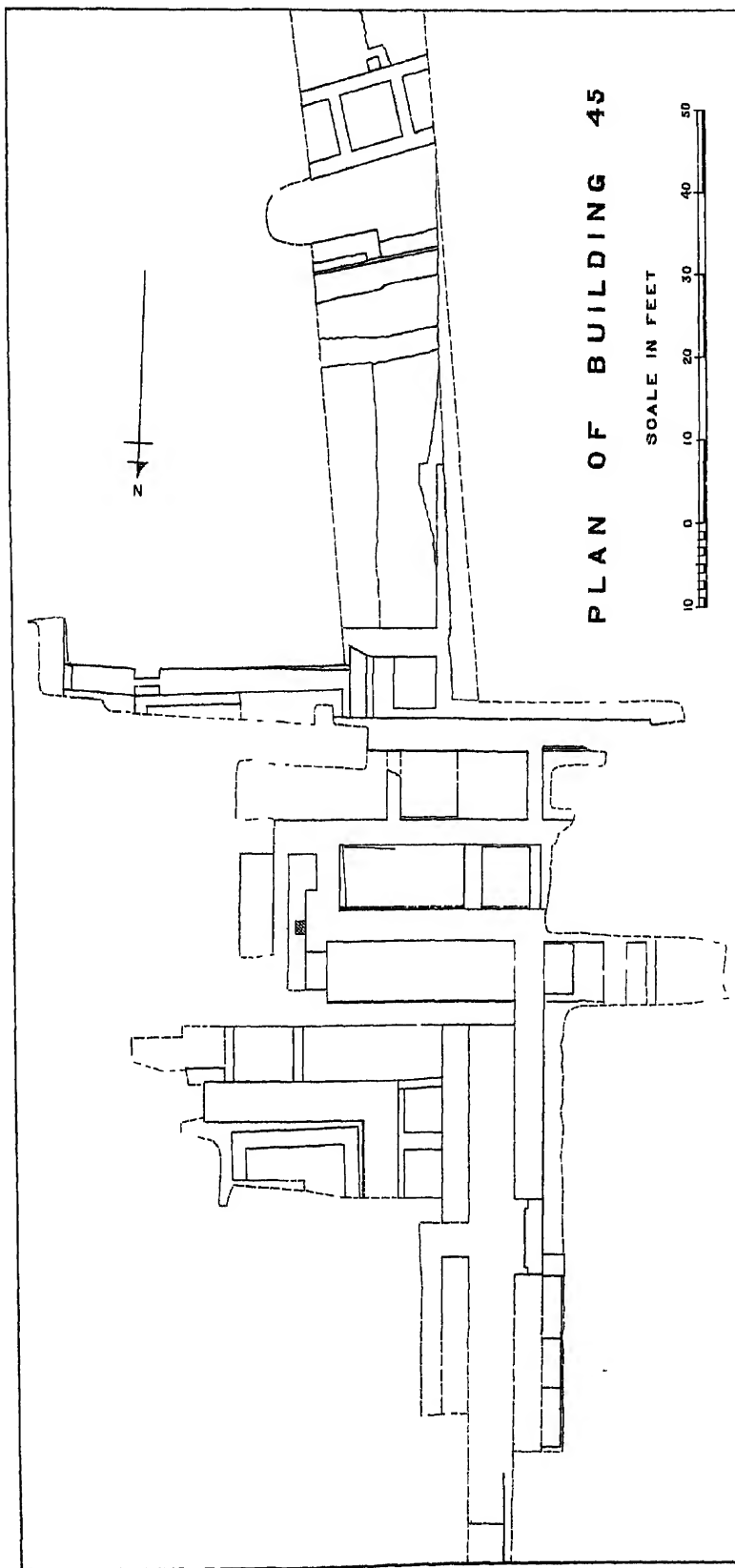
The row of shops fronting the road on the N. E. side of the *House of the Guild* call for no special comment. They were originally constructed in the Śunga period, but were rebuilt in Gupta times when the extension also over the remains of the Mauryan building IV was added.

Buildings 12 and 13.

Immediately to the north-west of the *House of the Guild* is the house and shop of Nāgadēva, which appears to have been built about the close of the first century B. C. It is very much the same in plan as the house already described, the most noticeable differences between them being that in the later structure there is more variety in the relative sizes of the rooms, and that the *vēranda* is considerably larger. The shop consists of three rooms only, divided from the house by what was probably an open court, and in front of these rooms was a raised platform or *verandah*, such as is commonly seen in the Indian bazaars of to-day. Originally, this platform was divided into two by a passage leading into the central chamber, but in the 3rd or 4th century A. D., when the floor level had risen several feet, a

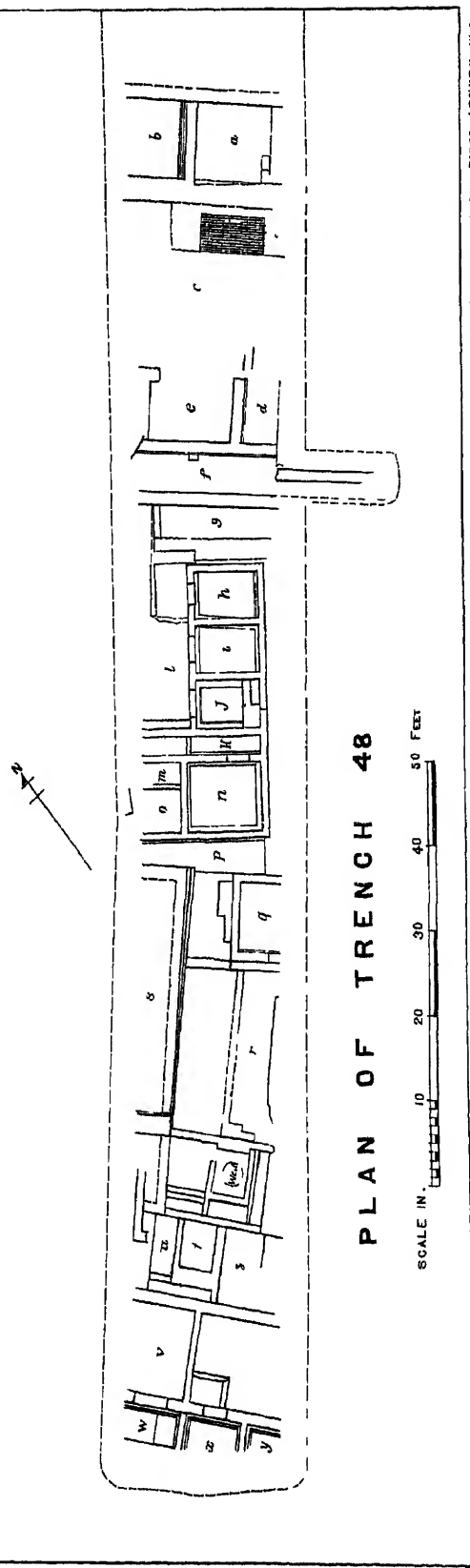
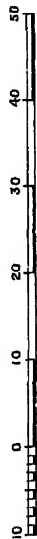
¹ See T. 20

² S. 26 and 27.



PLAN OF BUILDING 45

SCALE IN FEET



PLAN OF TRENCH 48

SCALE IN FEET



LITHOGRAPH BY PHILIP WILKINS, LONDON W.C.

flight of steps was inserted and a new doorway constructed higher up. Lying against these steps was found a coping stone of a railing inscribed with a line of writing in Brāhmī characters of about the 2nd century B.C.¹

The bricks employed in the south-west row of chambers in this house measure $19\frac{1}{2}'' \times 12\frac{1}{4}'' \times 2\frac{1}{2}''$, whereas in the rest of the house and shop they are $17\frac{1}{2}'' \times 11\frac{3}{4}'' \times 2\frac{3}{4}''$, which is the same size, approximately, as those used in all the other houses of this period. The later additions are built mainly of brickbats taken from the earlier structures. As to the foundations, they are very similar in character, both in this house and in others of the same epoch, to the earlier foundations of Mauryan times, the chief points of difference being as follows :—

(1) In the earlier foundations, where *kan̐kar* is used, it is laid with broken pottery or brick in alternating courses, while, in the later, the *kan̐kar* is mixed indiscriminately with broken brick. (2) Broken potsherds are almost entirely absent in the later. (3) In the earlier, the walls are carried deeper under-ground than in the later, the brickwork of the foundations often extending to a depth of 4 feet in the Mauryan period, but not more than 2 feet in later times. (4) Heavy stones are used to protect the corners in both periods, but in the later they project above the ground level and are more in the nature of kerbstones, whereas in the earlier they are completely buried.

Considering that they are built of a single course of brick without mortar, the walls of this and of many other houses on this site are remarkably well preserved. In this particular building they were found standing in places to a height of over 11 feet above the original floor level. Of course, they had been repaired on many occasions, and, as the ground level rose, the lower courses had been effectually protected against damage; but, even so, it seems surprising that they could have held together so well through all the centuries that have elapsed since they were finally deserted.

The stratification in this house and shop of Nāgadēva is singularly well defined, and as instructive as in any building on the site. From the earliest stratum exposed comes the interesting little mould, of which an impression is figured in Plate XXII, 9.² It was found between 6 and 7 feet beneath the foundations of room *n* and can hardly be later than the 3rd century B. C.; more probably, it is considerably earlier. The device is that of a woman under a palm tree with an uncertain object on her proper right, and, small and relatively rough as the work is, one cannot be mistaken as to the truly Indian character of it. To the next stratum belong the walls shown in blue, and the well which is partly concealed beneath the wall separating the chambers *P.* and *O.* This well starts 3 feet below the foundations of the party wall referred to, and was excavated to a depth of 20' from its top, a great deal of pottery being found within. It has a circular shaft, which for the first 7 feet is composed of wedge-shaped bricks measuring $17\frac{1}{2}''$ along the outer edge, $9\frac{1}{2}''$ across, and $10''$ along the inner edge; further down, the shaft is constructed of closely fitting terracotta rings laid one above the other.³

The third stratum is reached in the foundations themselves of the house and

¹ Inscription No. 1.

² See T. 9.

³ Cf. for similar construction the wells in buildings 30, 42 and 45.

shop of Nāgadēva, mixed with which were found a number of terracotta figurines, pottery and other objects of the first century B. C. Among these may be particularly mentioned : (a) the figurine of a male figure in squatting posture, with a head-dress and floral fillet and plumes (T. 19); (b) plaque with four horses facing, in relief, and floral border above. The horses are plumed and harnessed, as in the Sāñchī and other contemporary sculptures (T. 20); (c); miniature figure of a camel (T. 30). (d); the base of a steatite casket (St. 42); (e) an iron hatchet and chisel (I. 2 and 4); (f) a gold serpentine finger ring with six coils very finely executed (G. 5); Nothing that can be ascribed to a later date than the first century B. C. was found in the foundations of this house, and we may assume, therefore, that the house was erected about that time.

The next, or fourth, stratum is found on the original floor of the house. Among the minor finds in this stratum, all of which belong to the Kushana period, were : (a) Seventeen copper coins of Kanishka and Huvishka ; (b) a terracotta male bust (T. 39) ; (c) a well-preserved water bottle of fine clay, painted red (P. 52) ; (d) circular clay sealing with device of bow and arrow, as on Āndhra coins, and the legend *Gagasa* in Kushana characters (S. 73) ; (e) ditto, device of *svastika* and vase symbol, and legend *Na(m)di* in Kushana characters (S. 19) ; (f) ditto, with legend *Na(m)-disa*, in Kushana script (S. 20). Among objects of later Kushana date which were found in the débris covering this floor and between it and the upper floor were ; (a) a seal-die of ivory with legend, in late Kushana script, *Nagadēasya*, apparently for Nāgadēvasya, which I have assumed to be the name of the owner of the house and shop at that time (S. 5) ; (b) clay sealing, with *svastika* and two other symbols and legend *Kasakasa* (S. 110). That the house was hurriedly deserted, owing to some catastrophe, in the Kushana period, and afterwards suffered to fall to ruin, seems manifest from the coins and other articles left lying on the floors, and by the subsequent accumulation of débris in the rooms and court, but how long the edifice had been standing when this happened, it is impossible to determine with any degree of accuracy.

The fifth stratum, like the fourth, is also clearly defined by a *palka* floor, constructed some 3 feet above the original one, when the deposits inside the house had gradually accumulated to that height. This seems to have happened towards the end of the 3rd century A.D. at which time the additions to the house shown in green on the plan were also made ; but the minor objects found on this second floor belong, as we should naturally expect, to the time when the house was evacuated, not to the period of its restoration. This second evacuation, which took place in the early Gupta epoch, seems to have been as precipitate as the first and to have resulted from some hostile attack on the city ; for many missiles, such as catapult and sling balls, were found in the houses and lanes, and most of the houses themselves were burnt, while in the house which I am describing even the sacred images of the gods were abandoned to their fate. These images, numbering seven, were found in room B ; one of them (T. 49) is a terracotta figure of Śiva with his wife Pārvatī, seated side by side on a throne with bull and lion *couchant* in front ; another (T. 47) is a terracotta model of a shrine, consisting of a circular dish with a portal on one side, inside of which are seven female figures seated in a ring, with a pedestal in the

EXCAVATIONS AT BHITA.



(Fig. 1.) GENERAL VIEW OF BUILDINGS TO S.W. OF HIGH STREET, FROM N.E.



(Fig. 2.) VIEW OF HOUSE 7 AND ADJOINING BUILDINGS, FROM N.E.



(Fig. 3.) EASTON STREET, WITH HOUSES ON S.E. SIDE.

centre. The group of figures was damaged by a large sling stone, which had lodged between them, doubtless during the attack on the city. Other objects of interest found on and above this floor were a stone grinding table, decorated with leaf designs, quarter lotuses, waves and dots (St. 24); copper saucer, bowl, bangles, and pendant (C. 16, 17, and 22-24); iron arrow head and ladle (I. 8 and 14); and the sealings numbered 16, 35, 43 and 76 in the list below.

A singularly interesting problem is presented by the discovery in this house of Nāgadēva, as well as in several other buildings on the site, of a number of celts and other neolithic implements of slate, sandstone and diabase. They were found in the Kushana and Early and Late Gupta levels, and there can be no mistake as to the periods to which they belong. How, then, is their presence to be accounted for? I think that the most reasonable explanation is that, after being sacked and desolated by enemies, the town was on several occasions occupied by neighbouring jungle tribes, who were still in the neolithic state of culture, and who left these implements behind them. Another possible explanation is that stone implements were still being used for sacrificial or other religious purposes by people who had emerged centuries before from the neolithic state;¹ but this is less likely in view of the variety of the implements, which, if due to artificial conservatism, would reasonably be expected to be of a more or less uniform type. Whatever may be the true explanation, we have here conclusive proof that neolithic implements were in use in India until mediæval times.

The house of Jayavasuda is of the same age and of much the same character as **Building 19**. the house of Nāgadēva, though it boasts of a well in the courtyard, and of a store or treasure chamber beneath the floor of the corner room *r*. The latter feature is common to several other houses on the site, and recalls the somewhat similar chambers in the palace at Knossos, though there they are relatively shallow. In this case, the chamber is 13 feet deep, provision being made for descending to the bottom by the insertion of cross beams at intervals, in the walls; the beams, however, were widely spaced, and in such a confined area it must have been extremely inconvenient to climb up and down. The well referred to, in the courtyard was surmounted in the early Gupta period with a square well-head 4' 9" high. The circular section below this is contemporary with the house. It descends to a depth of 33" below the floor level and is constructed throughout of cuneiform bricks convex on the outer edge, concave on the inner, and measuring $8\frac{3}{4}$ " across \times 7" along the inside and $10\frac{3}{4}$ " along the outside.

The stratification in this house corresponds precisely to that in the house of Nāgadēva, and there can be no doubt that it was built, destroyed and rebuilt at about the same times. From the foundations of room *f* came the beautiful terracotta medallion T. 17, figured in Plate XXIV. The scene, which is repeated on both sides of the medallion, recalls in every feature the reliefs of Sāñchī, but the workmanship of the die from which this relief was stamped, is infinitely more minute and delicate than any workmanship in stone or marble could ever be. In this case I think it

¹ Examples of such conservatism are to be found among the ancient Egyptians and the Mexicans. The Jews, too it will be remembered, continued to use stone knives for circumcision in a metal age (Ex. IV, 25 and Josh. V, 2), while the Romans used them for sacrifice; whence the proverb *inter sacrum sarumque stare*. But I do not know that the true neolithic types of implements were preserved in any of these cases.

probable that the die was of ivory—the material of several of the seal-dies found at Bhītā ; but, whether this surmise be right or wrong, I have no doubt that this was just the sort of work that was being turned out at the time by the ivory carvers of Ujjain, who, as we know, were employed upon the sculptures at Sāñchī. As to the scene depicted on the medallion, Dr. Vogel has suggested a comparison with the scene in Kālidāsa's famous drama, the Śākuntalā, in which king Dushyanta with his charioteer is being entreated not to kill the antelope, which has fled for refuge to Kaṇva's hermitage.

On the Kushana level, *i.e.*, on the lower floor, were found a variety of potteries, a female figurine of rough make (T. 34), and several seals, among which were two belonging to guilds inscribed in Kushana characters (S. 57 and 59) and another reading *Pusamitasa* in characters of somewhat earlier date (S. 64).

On the second floor, evidences of a conflagration were obvious in all the rooms, but most especially in the verandah and south-west side of the courtyard, where there were great quantities of charred rice and other grain. Here it was that a particularly fine collection of clay scalings, containing twenty-three different types, were found. From the fact that they were scattered about over a thick layer of charred rice and ashes, with other burnt débris above them, I think it likely that they had fallen from the upper storey, when it collapsed in the flames. The whole collection is an extremely interesting one and is fully described in the list of seals below.¹ Particularly fine specimens are Nos. 25 and 32 of the list, the former of which contains the name of an unknown prince, apparently of the Āndhra line, “Mahārāja Gautamiputra Vṛishadhva.” From the same floor, room p, came a seal-die of ivory with the legend, in northern Gupta characters ; *Śrēsṭhī Jayavasuda* “the banker Jayavasuda”, who, we may believe, was the owner of the house at that time.

Before proceeding to the houses on the opposite (N. E.) side of the road, I must pause for a moment at a deep pit which I caused to be sunk in the roadway between the buildings 12 and 22. In this pit the Gupta stratum ended between 8 and 9 feet from the surface ; then came the Kushana, Śunga and Mauryan and pre-Mauryan débris clearly marked by the numerous burnt bricks and brickbats mingled with it. This kind of débris extended down to a depth of some 15 feet from the surface and judging from the clear stratification in the neighbouring houses appears to carry us back to the 4th century B. C. Below this level the débris was mainly composed of mud or unbaked brick mixed with innumerable fragments of pottery and divided by thin lines of charcoal mingled with *kankar* and pottery which mark a successive series of habitations. At about 17 feet from the surface, however, on the north-east side of the trench several courses of massive bricks came to light, measuring some 17" × 16" × 4½". These are the earliest baked bricks found on the site. I estimate that they belong to the 4th or 5th century B. C. Still lower down, at a depth of 21 feet from the surface and on the S. W. side of the pit, was a floor, several inches in thickness, made up of broken potsherds and clay. The clay and potsherds appear to have been mixed together, pounded hard, and then burnt *in situ* ; for the burning is much too regular and perfect to have been effected by accidental fire, even though the

¹ Nos. 22, 25, 31, 32, 39, 46, 48, 51, 55, 74, 75, 78, 81, 82, 83, 91, 92, 95, 106, 118, 120

houses were entirely of wood. Below this floor were other thin habitation lines of ashes and pottery, and then, 2 feet lower down, and at a depth of 23 feet from the surface, came a floor 5 to 6 inches thick, composed of *kankar*, and pounded potsherds. Beneath this floor the digging was continued for another two feet, but only small fragments of potsherds were found dispersed here and there in stiff clay, and it did not seem worth while to proceed further.

Allowing for a relatively rapid rate of accumulation and assuming that the occupation of the site was continuous, the lowest floor can hardly be assigned to a later date than about 800 B. C., and the terracotta floor above it to a century or thereabouts later. The minor antiquities found in the lower strata were rough in character and few, but their early date invests them with unusual interest. From the lowest floor and a little above it came the terracottas numbered 3 to 6 in the list, as well as fragments of fine black lustre ware with highly burnished surface. From the terracotta floor came a small cup (P. 8) and about 18" higher, from the 19-20 foot level, the potteries numbered 7 and 11.

The terracotta weight (P. 20) was found at a depth of 17 feet from the surface; the miniature elephant (T. 16) two feet higher in the Mauryan stratum and three lumps of pure hammered gold (G. 1) in the same level. To the Gupta period belongs the terracotta head (T. 57) found 8" below the surface, and a clay sealing (S. 97).

Of the buildings on the opposite (N. E.) side of the main approach Road the most important is the "House of Pushyavṛiddhi," as I have named it from an ivory seal found in chamber *a* (23). Portions of this house were built originally in the Mauryan period, *viz.*, rooms *b*, *j*, and *k*, as is evident from their foundations and the bricks used in them which measure $20\frac{1}{2}" \times 13\frac{1}{2}" \times 2\frac{3}{4}"$. The rooms *j* and *k* however were largely rebuilt in the first century B. C. and at the same time the rest of the house was constructed, the whole forming, as usual, a series of chambers around a central courtyard, but seemingly on a more irregular plan than the houses described above. Unfortunately, the remains of this structure are much damaged, and it is not possible, therefore, to determine the plan with the same precision as in other cases. The floor level was found at a depth of about 13 feet from the surface on the N. E. side of the house, and somewhat less on the other side, owing to the slope in the ground towards the High Street. In the case of the chamber *b*, the Mauryan floor did not appear to have been disturbed, but in the chambers *j* and *k* the floors had been remade at a later epoch, and antiquities of both periods were found below them. Like the houses of Nāgadēva and Jayavasuda, this one must also have been deserted hastily in Kushāṇa times, as indicated by the minor objects found on the floors. Like them, too, it was reoccupied again in the 3rd or 4th century, when certain additions were made to it; but the floor laid at that period was not so distinctly preserved. Among the smaller antiquities which the excavation of this house brought to light, five objects belong to the Mauryan stratum, namely, the potteries numbered 23 and 24, a terracotta toy ram (T. 15), a copper bangle (C. 20), and a finely worked circular slab of steatite, decorated with a spiraliform design, which was used perhaps as a matrix for stamping gold leaf medallions (St. 35). Of later date are the terracotta figurine (T. 21), a small iron bell (I. 1), and part of a stone grinding stool (St. 23). All these were found below the floor level at varying

Building 23.

depths in the foundations of the house, while on or immediately above the floor were articles of Kushāṇa fabric, *viz.*, the terracotta figure of an elephant (T. 38), an *āyāgapatta* slab of local sandstone (St. 34), a copper *tāmraṇḍa* (C. 9) and an earthenware melting pot (P. 64). The seal No. 29, with a legend inscribed in characters of the 2nd or 3rd century A.D. was found about 18" above the floor level in room *d*, seal No 44 about 6' 6" above the same level, and sealing No. 77, about 4' higher.

Shops 9, 10 and
22.

The three ranges of shops fronting on to the High Street, and those in row No 10 facing on to the side street which was constructed in Gupta times, present no features which call for special remark. For the most part they were explored to the Gupta level only or a few feet below, and all the small antiquities of interest found within them are of Gupta date. Among these I may notice a terracotta plaque (T. 69), an iron arrow-head (I. 20), part of an iron *kaṇḍha* used by confectioners (I. 19) and the sealings 79, and 109, the second of which contains the name of Vichhīgrāma, which, as already stated, I take to be the ancient name of Bhītā.¹

Buildings 27 and
28.

From the house of Pushyavṛddhi a broad trench was carried in a north-easterly direction and revealed the two groups of remains 27 and 28, the former belonging to a house of the 1st century B.C. largely rebuilt and repaired in Gupta days, the latter to a row of shops fronting on to another street which runs, roughly, parallel with the High street. Towards the S.W. this street leads direct to one of the bastions of the town wall, and, accordingly, I have named it 'Bastion Street'. Continuing the trench on its further side, I came upon the two houses of Gauridāsa and Dharadāsa, which I proceeded to excavate entirely, widening out the trench so as to clear the side streets around the tenements as well as part of the adjacent

Buildings 29 and
30.

buildings. The House of Gauridāsa (No. 29) was built in the 1st century B.C., and, except for the addition, sometime in the 3rd or 4th century, of the verandah *i* in the courtyard, does not appear to have been altered or repaired to any great extent in later times. What precisely was the purpose of the small chambers in the floor of room *m* is not apparent, but it seems likely that they, as well as the deeper chamber in room *l*, were intended for stores or for treasures. In the plan (Pl. XIII) the latter chamber is shown as contemporary with the building of the house; it is not improbable, however, that it was constructed at a subsequent date. The drain running along the passage at the side of the house like the similar drains of the neighbouring houses, was constructed, apparently at about the same time as the verandah, for carrying off the water from the interior court. Later on, in the Gupta period, when débris had accumulated inside the courtyard and another floor was laid at a higher level, the section of the drain inside the house had necessarily to be raised. The walls of this house of Gauridāsa were constructed of bricks averaging $17\frac{1}{2} \times 11\frac{1}{2} \times 2\frac{1}{2}$ ", laid as stretchers, and were found in a singularly good state of preservation, their height, in places, being as much as ten feet.

The several strata in this house as well as in the house of Dharadāsa next door closely resemble those in the houses of Jayavasuda and Nāgadēva, the only difference being that in both these houses there was a well defined floor of the Gupta epoch about

¹ Cf. Seal No 11.

EXCAVATIONS AT BHITA.



(Fig. 1.) BUILDINGS 28, 29, 30 AND 46, FROM N.E.



(Fig. 2.) BUILDINGS 29, 30, 31 AND 46, FROM S.W.

5' 6" above the original floor and 1' 9" above the 2nd floor which was added in the 3rd or 4th century A.D. Moreover, in the house of Dharadāsa there was an additional floor, composed of bricks measuring about $17\frac{1}{2}" \times 10\frac{3}{8}" \times 2\frac{1}{2}"$, which was laid from 8" to 12" above the original floor and which probably dated from the latter part of the 1st century A. D.

The original plan of this house of Dharadāsa is difficult to determine owing to the reconstructions which took place in the 3rd or 4th century A. D. and which are indicated in green on the plan. These reconstructions conceal from view the earlier foundations on the N. E. side of the house, but it is probable that the later walls were erected on the remains of, and consequently follow the same line as, the earlier, although it must be admitted that the two chambers on the N. E. side are larger in proportion to the size of the house than would naturally be expected in the earlier period. In room *a* of this house is a well which seems to have been sunk in late Kushana epoch. It is constructed of the usual earthenware rings, $5\frac{1}{8}"$ deep and 2' 5" in diameter (internally) and is capped with a square well head, 1' 6" high above the circular section. This well was cleared to a depth of 6' only.

It will be seen from the plan and photograph on Plates XIII & XV,⁽²⁾ that there were long and narrow erections against the façades of these and the adjacent houses in Bastion Street, and at first sight it might be supposed that they served the same purpose as the plinths supporting the verandahs in front of the shops in the High Street. This supposition, however, is precluded both by the height of the walls and the fact that there are no entrances from the street to the chambers behind them. The brick work of the inner face of the walls of these projections was left rough, and the rubble filling within was of the same quality throughout, and manifestly not the result of gradual accumulation. It is obvious, therefore, that these additions, were in the nature of solid buttresses against the façades of the houses, but for what definite purpose they were erected is not apparent. From a constructional point of view they would be useful of course as supports to relatively thin and unsubstantial walls of the houses, and it may have been that they extended only as high as the top of the first storey, thus forming high plinths for open verandahs on the level of the first floor. It is more probable, however, that they were built for purposes of defence either against external foes, who might have to be fought from street to street, or against thieves, who appear to have made an art of breaking through house walls.¹ In this connexion, it is to be noticed that as a rule only one entrance, and that generally a very narrow one, was allowed to each house, and that the lanes around were carefully blocked up with cross walls at various points. This may have been for structural reasons, but it served also for protection as well. Party walls appear to have been rigidly avoided, possibly because they could be too easily pierced from the other side.

As to the minor finds made in these two houses, the ground was not penetrated to more than a few feet below the bottom floor, and that only in one or two rooms. Consequently the Mauryan stratum was untouched, and of the later period only

¹ Cf. *Mricchhakatikā* Act, III, where the orthodox methods of removing the bricks from a wall are described. The *τοιχωρύχος* of Greece was perhaps equally professional. The introduction of mortar must have put an effectual stop to this method of burglary in India.

two relics of any interest were found. These are two little figurines of terracotta (T. 22 and 23), which once belonged to toy tricycles. The former is illustrated in Plate XXIII. To the Kushana period belong the terracottas numbered 36 and 45; the potteries numbered 51, 53, 62, and 69; an iron hatchet (I. 6) and a seal with the legend *nigamasa* in Kushana characters (S. 58). The above came from the lowest floors in the two houses. Far more numerous were the finds of the Gupta period which were brought to light in the higher strata. Among these were a large collection of terracotta figurines and a variety of seals and clay sealings. Of the latter the most noteworthy are: Nos. 3, 7 and 9 giving the names of Dharadāsa, Guridāsa and Manōratha, who appear to have been the occupants of the houses at different periods; No. 15, which belonged to "the Lord of Kālāñjara;" No. 24, a find of 45 sealings with the Buddhist creed, all from the same mould; No. 33 inscribed with the name of the "Aśvapati, Jayanta;" No. 34 "of the office of āyukta of II II the Mahārāja Śankarasimha;" and No. 42, "belonging to the office or court of the district of Sāmāharsa."

Town wall.

Before leaving this part of the site a few words must be said of the town wall at the S. E. end of the Bastion Street. The defences at this point were exposed for a length of 40 feet, and were found to consist of a wall, 11' 2" thick, raised on an earthen rampart with a quadrangular bastion attached, which projects 15' from the outer curtain of the wall and measures 31 feet along its face. The wall appears to have been constructed in the early Mauryan or pre-Mauryan period and was pierced originally by a gateway at this point. The entrance, however, was closed up in the Mauryan period and at the same time the wall was strengthened by the addition of a bastion, which was subsequently enlarged by the addition of a casing 4' in thickness. The bastion is standing to a height of 6' to 9' above its base which was 13' below the surface of the mound. The inner and earlier part is built of bricks¹ measuring 20" to 20½" × 13½" to 14" × 3" to 3½", its core to a height of 5' from the base being composed of unburnt brick and, above that point, of solid burnt brick throughout. The bricks of the later casing are of approximately the same size.

Trench 48 and building 50.

Of the structures in trench 48 and of building 50 to the N. W. of it there is little to be said. The former are mainly of the 1st century B. C. or of the 2nd or 3rd century A. D. and similar in character to those already described. Objects of the earlier date (P. 46 and St. 20) were found in the foundations of the house in the middle of the trench, but only the original floor of the house was intact, and, as regards the antiquities above this floor, nothing definite as to their date can be predicated from the stratum in which they were found. Thus, the Gupta sealing No. 37 came from chamber *i*, at a depth of 10' from the surface, and No. 67 from the same depth in chamber *o*. On the other hand, the sealing 56 of about the 3rd century A. D. was found only 9" and the Kushana seal No. 10 only 12" lower down. The building 50 is a temple of late Gupta times, which was partially excavated by Dr. Fuhrer some years ago. I completed the clearance of the foundations, but found nothing of special interest.

Trench 40.

Far more interesting and instructive was the excavation in trench No. 40, near the north-eastern side of the town. Here I found five clear and distinct strata of

¹ The clay of these bricks was mixed with straw

buildings, the most important of them being the Mauryan (blue), the floor level of which was reached at a depth of 16' below the surface. At their highest point, *viz.*, between the chambers *c* and *d*, the remains of this stratum were standing to a height of 5' 8", exclusive of the foundations which are about 3' deep. The walls are built of bricks averaging $20" \times 14\frac{1}{3}" \times 3\frac{1}{4}"$, laid lengthwise as headers in a single course. The floors inside the rooms *c* and *d* are composed of brick laid flat and covered by a thick layer of earth with a coating of concrete, of inferior composition, above.

The remains of the room *h* in the middle of the trench appear to belong to two periods, the lower part of the walls being of the same date as the rest of the house, while the upper part, which has a slightly different orientation, is somewhat later. In the upper section the bricks are laid as stretchers; in the lower, as headers; but in both sections they are approximately of the same size. Beneath the lower foundations of this chamber are the remnants of two other walls of *pakka* brick, which belong to a still earlier stratum. In these two walls the bricks measure $20\frac{1}{4}" \times 14" \times 3"$ and are laid as stretchers. To the same early age belong the foundations of the chamber *i* immediately to the north-west.

This Mauryan building must have fallen into almost complete ruin before the structures of the succeeding stratum above were erected; for the débris beneath the floor of the latter consisted largely of roof tiles, semi-petrified wooden beams, and bricks from the walls of the Mauryan dwelling. The roof tiles were roughly grooved on one side, plain on the other, and provided at the edges with flanges, which overlapped one another, so that there was no need of separate ridge tiles, such as were used at a later date, to protect the interstices between them.

Of the smaller antiquities found on the floor of this building or in the débris immediately above it, only three are deserving of mention, *viz.*, a metal armlet, resembling the modern *ananta* (C. 19); an earthenware goblet (P. 45); and a goldsmith's melting pot (P. 47). Whether they belong to the Mauryan or early Śunga period, cannot be determined with certainty.

The walls of the next stratum spring from a level about 2' 6" above the brick and concrete flooring of the Mauryan building; and are constructed partly of bricks taken from the earlier edifice, partly of new bricks averaging $17\frac{1}{2}" \times 10\frac{3}{4}" \times 2\frac{1}{4}"$. In room *a* is a store chamber the bottom of which is about 3' 6" below the floor of the Mauryan house, and in chamber *e* is a well, descending to a depth of 17'. The shaft of the well is square for the first seven feet from the top, and built of bricks; but circular below and composed of earthenware rings. On the floor of chamber *b* was found the very interesting fragment of a relief (St. 8) figured on Plate XXXI, the style of which suggests a date later than the sculptures of the Sāñchī Gateways, but earlier than the Kushāṇa work of Mathura. I assign it to about the middle of the first century A. D.; and it is likely enough that the building in which it was found fell to ruin about this time. To about the same date belongs the vase numbered 42.

The foundations of the buildings in the next stratum (green in plan) start from a height of about 4' 6" above the Mauryan level. The bricks used in them are of the same size as those in the previous stratum ($17\frac{1}{2}" \times 10\frac{3}{4}" \times 2\frac{1}{4}"$), but none of the earlier Mauryan bricks are mixed with them. From the débris, 1' 6" below the floor level of this stratum, came the Kushāṇa seal No. 71, and to about the same

period are to be assigned the small copper bowl (C. 2) and the potteries numbered 55, 56, 58, 61, 65 and 67.

At the back (S.W.) of the chambers *a* and *b* and at a little distance from them I exposed in a deep pit another interesting wall, which probably antedates the earlier walls in room *h*; for the floor level is 20' below the surface; and the bricks employed here are of a smaller size (17" × 8" × 3½"). The foundations of this building are laid in *pakka* brick for a depth of 2' below the floor level, and are splayed with 6 footings on the outside. Below the *pakka* brick are several courses of unburnt brick. The whole was strengthened by a packing of *kanbar*, alternating in layers with broken potsherds, materials which must also have afforded a first class bed for the street passing alongside the building. The only minor antiquity from this pit was a primitive terracotta figurine (T. 7).

Trenches 41 and 51.

The remains in the cuttings 41 and 51 call for no particular comment. The former, which are of Gupta date and built of brickbats, were covered by nine feet of hard soil, and I did not therefore feel justified in going to the expense of following them up further. The latter represent two periods of building, the Gupta and Kushana (?), but here again it would have involved too much labour to continue their excavation.

Trench 42.

In the low-lying ground between these two trenches the surface soil had been carried away to a depth of some 10 or 11 feet by the rains washing from the higher ground through the gateway of the town, and accordingly I decided at an early stage in the excavations, to make a cutting here with a view to examine the earlier strata of the site. The trench which I opened up measured 80' long by 34' broad, and was eventually carried down to a depth of 34' from the surface. At its eastern end is a well, probably of the 1st century B. C., which is constructed of earthenware rings 4½" high and provided with a projecting flange at the top. This well is practically at the surface level. Beyond it, towards the N. E. are the remains of some chambers of earlier date, the foundations of which are 4' lower down. In one of these chambers (*c*) was found the terracotta figurine No. 18, a mutilated figure of an elephant (T. 29), two wheels of a toy-cart (T. 25-26), and, nearer the surface, the miniature cup (P. 31). Both at this point and over the whole area covered by the rest of the trench, the surface débris for a depth of two or three feet had been much disturbed by the scouring of the water or other causes and as a consequence Āndhra, Kushana and Gupta objects were found side by side with one another in the same stratum.¹ Lower down, however, the strata were clearer, the Mauryan following the Śunga, and itself being followed by the pre-Mauryan and primitive strata in regular succession. The remains of burnt brick in this trench extended to a depth of about 11' from the surface, corresponding in date with the 5th century B. C. Below that point the débris presented the same general appearance as it did in the deep trench in the High Street, innumerable fragments of pottery being mixed with layers of ash and remnants of concrete, but, here, there were no *pakka* floors of concrete or terracotta, such as I found in the other trench, to help in defining more precisely the different strata. Potsherds were found in considerable though gradually lessening numbers to a depth of between 28 and

¹ See S. 28, 30, 66; T. 98; I., 3; St. 44; P. 36.

29 feet, after which the artificial accumulation of the town gave place to natural *kankar* formation, in which for a few feet were mingled here and there small particles of terracotta, which had evidently found their way from above, with the percolation of water.

Of the minor finds from this trench the following are noteworthy. From the Śunga level—P. 44 and T. 14; from the Mauryan and pre-Mauryan—St. 37 and 39, T. 10 and 13, and P. 22; from the earlier strata,—P. 12 and 19 (14'),¹ 10 (15'), 18 (16'), 9 (17'), St. 38 (20'), T. 1, and St. 36 (21'), G. 2 (22'), P. 15 (29') and G. 1 (29' 3"). The two last mentioned are the earliest objects recovered on the site. I estimate that they can hardly be later than the 10th century B. C. The presence of portions of two steatite boxes, turned on the lathe and well-finished, at 20' and 21' respectively, below the surface, is significant. They must belong to about the 8th century B. C. and show that at that date the people of Bhītā were far from being in a very primitive state.

A little to the north-west of the spot I have been describing is a mound of moderate dimensions—now the highest point in Bhītā—which I caused to be examined by a trench running from north to south, the cutting being afterwards turned in a south-easterly direction and linked on with trench 42. Near the foot of this mound are three wells, one constructed of brick, the other two of earthenware rings. The bricks used in the former are wedge-shaped, measuring $11\frac{3}{4}$ " across, 15 " along the outer edge, which is convex, and $9\frac{1}{2}$ " along the inner, which is concave. The other two wells are similar in all respects to the well at the east end of trench 42, save that the rings are 5 " deep instead of $4\frac{1}{2}$ ". The remains on the rising ground a little above these wells are referable to about the 5th century A.D. The only antiquity of value found in these was a broken casket of steatite and, near by, a number of beads of great variety and interest. Two of these beads are unique, being composed of glass laid on in thin layers, with gold leaf between.

Higher up on the top of the mound is a building of much more solid construction, which appears to have been erected about the 8th century A. D. or possibly later. Its walls vary in thickness from $2' 2"$ to $3' 11"$, and are faced with small brickbats of different sizes, with a core of rubble between them. The faces of some of the walls are chiselled, but the chiselling appears to have been done before and not, as is usually the case, after the bricks were set in position. Some finely carved bricks from some structure of early Gupta date are also built, here and there, into the walls.

INSCRIPTIONS ON STONE.²

The only inscriptions besides the legends on the seals, discovered at Bhītā, are four in number, and are carved on stone. A few letters in the Gupta script were also found engraved on a massive brick, but nothing can be made of them.

¹ This and the following numbers in brackets indicate the depth, in feet, at which the various objects were found.

² For the following list of inscriptions and seals I am indebted to my assistant, Pandit Daya Ram Sahni, M.A. References to this and other lists are abbreviated as follows — Inscriptions on stone = Inscr., Seals and Sealings = S.; Terracottas = T.; Potteries = P. Stone = St.; Copper and brass objects = C.; Iron objects = I.; Gold objects = G.

1. One line of writing in Brāhmī characters of about the 2nd century B. C. Inscribed on a coping stone (St No. 1) found lying against the steps in front of house No 12. Language Sanskrit:— na (P) *Sēliyā-putrēna Gōmitrēn(n)a kārītā bhagavatō Nāgasā*

“By Gōmitra, a son of Sēliyā, was caused to be made of the holy Nāga”

2. Another fragmentary inscription on the same coping stone. *prīyatām Bhagavā*

“May His Holiness be pleased.”

Another coping stone, which evidently belonged to the same monument, was found built up in a modern *chabūtra* in the village of Bhītā. An inscription carved on it had been mutilated by the sharpening of tools. The extant portion reads:—*Kōtā-putrēna* “by a son of Kōtā.”¹

3. Carved on a fragment of a circular stone column, which judging from its curvature represents about a fifth of the whole.

Transcript.

1. 1. *sa athādasā sa [mvatsarē⁺]*
 1. 2. *takasa sōrājē nī*
 1. 3. *sanālinā gahapa [tinā^{*}]*
 1. 4. *tasa asasapu*
 1. 5. *kē (P) nakasa putēna sa*
 1. 6. *Manibhadusa chhatō kū [apitō⁺]*

“In the eighteenth year of in the prosperous reign of taka by , who was a house-holder, with his kinsman, (*nāti*) by a son of kēnaka of Manibhadra an umbrella (was made).”

It is clear that the fragment on which the inscription is cut formed part of the staff of an umbrella (*chhatō*).

4. Carved in large Gupta letters on a rough stone found a little to the south of House No. IV. The inscription seems to read:—*Karmmamisra*.

SEALS AND SEALINGS.

Among the minor antiquities unearthed at Bhītā, the most interesting and instructive perhaps are the seals and sealings, which were found at varying depths in different parts of the site. They number 210 in all and comprise 120 varieties and 67 duplicate copies. The remaining 23 specimens are too worn to be distinguishable.

The purpose which such seals served in the life of ancient India, is fully discussed by Dr. Fleet in the last edition of the *Imperial Gazetteer of India*.² Indian kings kept seals (*nāma-mudrā*) and so did princes, ministers and other officials.

¹ It is noteworthy that both in this and in inscription No. 1 the donors are described by their matronymics.

² The Indian Empire, Vol II, pp 1-88.

This is evidenced by the *Abhijñāna-śakuntala*, the *Harsha-charita* and the *Mudrārākshasa*. The seal which Dushyanta presented to Śakuntalā was a finger-ring carved with his name (*nāmāksharāṇi*). Such also, presumably, was the golden seal of king Harshavardhana. But they were primarily used for marking letters and documents. An interesting illustration of this practice is found in the *Mudrārākshasa*, where, in the 5th Act, we read that the letter and parcel with which Siddhārthaka was caught when attempting to escape from the camp of Malayakētu, were stamped with the seal of the minister Rākshasa.¹ Similarly, impressions from the seals of kings and other personages of rank were used as passports. Siddhārthaka, the character referred to, was arrested because he had not obtained a seal (*agrihita-mudra*) from Bhāgurāyaṇa who had been entrusted by Malayakētu with the care of his camp. The *Vana-parvan*² of the *Mahābhārata* states that on the occasion of a siege the arrangements for the defence of the city of Dvārakā included a command that "nobody was to leave the city without a passport, nor was anybody to be admitted unless he was equipped with a passport." A similar stanza in the *Harivaṃśa*³ directs that "all persons desirous of going should go with a seal of the king. The door-keeper should not admit any person who did not possess a seal."

All these classes of seals are represented in the Bhīṭa collection. Of seal-moulds or matrices there are thirteen, *i. e.*, one of bronze or copper, six of burnt clay, one of stone and five of ivory.⁴ Four of them (Nos 1, 5, 6 and 8 of the list) are in the form of circular discs, seven are pyramidal and two (Nos. 4 and 7) are shaped like finger-rings with flat surfaces for the device. Some of them have both devices and legends carved on them while others have only legends or symbols. The legends and devices are reversed and countersunk in all except No. 1, where the letters are raised.

Among the sealings two general types prevail, namely, those that were attached to letters or parcels and those which were used as tokens or pass-ports, as described in a previous paragraph. The main difference between them is that the reverse of letter sealings exhibits clear marks of the string or tape to which they were attached, whereas the other type is quite plain on the back. Another point of difference is that the tokens seem to have been actually baked in fire, whilst the other sealings are either quite *kachcha* and soft or only slightly exposed to a fire from a distance. Four sealings (Nos. 42, 43, 90 and 98), which are plain on the reverse and pierced through, seem to have been attached to documents by means of strings and not put directly on them.

The process of sealing letters was described by the late Dr. Bloch⁵ but not altogether clearly. An examination of the back of the seals from Bhīṭa shows that

¹ Cf. *grihitō mayā Āryya-Chānakyaēna prathamā-lēkhitō lēkhō Amātya-Rākshasasya mudrā-lāñchhitāḥ. Tasyaiva mudrā-lāñchhitā iyam ābharana-pēṭikā*. "I have received (this) letter which was first caused to be written by the noble Chānakya and (then) marked with the seal of the minister Rākshasa. This packet of ornaments also bears an impression of the same seal."

² *Adhyāya* 15, verse 18. *Na chāmudrā-bhiniriyāti na chāmudraḥ pravēśyatē*.

³ *Mudrayā saha gachchhantu rājñō yē gantum-īpsavaḥ : na chāmudraḥ pravēśhṭavyō dvārapālasya paśyataḥ*. St. Petersburg Lexicon, Vol. V, Column 829.

⁴ The *Mitākshara* quoted in the *Śabdakalpādruma* enumerates four substances of which seals were made: *Sauvarṇam rājatīm tāmrīm-āyasīm vā susūbhītām, salilēna sakṛid-dhantām prakshipēt-tatra mudrikām*.

⁵ *A. S. R.*, 1903-04, p. 101.

the broad groove at the back was probably caused by the rounded surface of the article, and not, as Dr. Bloch thinks, by the blade of a knife used to hold the string tight. So also the thin cross marks are not due to the blunt edge of the knife, but are the impressions of the string itself. The process employed seems to have been this: the string was first passed round the object, generally twice (for the back shows a double string mark), and then tied into a knot. A layer of moist clay was then laid on and sealed. In some instances, however, the string was first wrapped round the article and then over the clay, a second layer of clay being added to receive the impression. This is distinctly shown by the fact that some of the seals exhibit one or two holes running through them. These holes are open at both ends, for the string which went through them was either removed in the course of unpacking, or may have decayed.

In the list appended below, the sealings have been divided under several heads:—temples, rulers, officials and so on. Of the religious seals five (Nos. 14-17 and 23) refer to the cult of Śiva, under the names of Kālāśvara, Kālāñjara-Bhattāraka, Bhadrēśvara and Mahāśvara². Only one bears the name of Vāsudēva (No. 21); one (No. 18) that of the goddess Sarasvatī and two (Nos. 19-20) that of Nandī. The collection of 15 sealings (No. 24) bearing the Buddhist creed is the only certain relic of Buddhism which came to light, though the inscribed fragments of stone railings may have been Buddhist or Jain. The sealings of the second class supply the names of three rulers who must have flourished about the 2nd or 3rd Century A. D.¹ and of queen Mahādēvī Rudramatī (No. 30), of about the 1st Century A. D. The official seals do not reveal any new titles. The sealings of guilds or assemblies bear the legend *nigama* or *nigamasa*. Of geographical names there are only four (Nos. 106 to 109) namely, Chitrāgrāma, Rudrikota, Jatēyagrama and Vichhī, the last of which is the only one which can be identified with any degree of probability. Samāharsa or Sāmāhasa (No. 42) was the name of a district (*vrshaya*).

The dates of the seals range between the 3rd or 4th Century B. C. and the 9th or 10th Century A. D. The majority belong to the Imperial Gupta period, and only two seals (Nos. 104-05) to the 9th or 10 Century A. D. The language of the inscriptions on the pre-Gupta seals is, as usual, Prākṛit or mixed Sanskrit. In the legends on the remaining seals it is pure Sanskrit, though in some instances not altogether free from such errors as are commonly met with in copper-plate and other inscriptions. These are: (a) the omission of the *visarga*, as in *Samādhyāśa-putrasya* (No. 3), *Mahādēvyā Śrī* (No. 30); (b) the doubling of *dh*, in *Samādhyāśa* (No. 3); (c) the substitution of the palatal *ś* for the cerebral *sh* in *Puśyaviddhīsyā* (No. 6); (d) wrong case-ending as *sya* for *ēh* in *Puśyaviddhīsyā*; and (e) omission of *sandhi* as in *Sēnapati-In°*. (No. 31). The names of the owners of the seals are generally expressed in the Genitive Case. A few are, however, in the nominative as *Chandradattah* (No. 80). In some cases the names are left without any case-ending. Such are *Padmanābha* (No. 88), *Āryyarakshita* (No. 93), *śrēshihī Jayavasuda* (No. 2), and *Amātya-Dharmadēva* (No. 38).

¹ Their names are Vṛishadhvaṇa, Śivamēgha and Bhīmasēna. They were Andhra chiefs, but their names do not figure in any of the Purāṇic lists published in Rapson's *Cat. of the coins of the Andhras and W. Kshatrapas*. P. CLIV, *et seq*.

Turning to the symbols, we find that they are all Brahmanical, either Śaiva or Vaiṣṇava, the only exception being the fire altar of the Persians, which figures on seals Nos. 101-104 and appears also on a few Basārh seals of the Gupta period. Among the Śaiva symbols the most prominent are: the *liṅga* (Nos. 15-16), the trident (*triśūla*) combined with the battle-axe (No. 14), the *Nandipada* (Nos. 37, 77, etc.), and the bull (No. 77). In some instances the bull has a sphere or disc between its horns, such as appears on certain Andhra coins. A curious, probably Śaiva, symbol which occurs on eight seals (Nos. 14-16, 25-28, and 86) is a pyramid of balls or dots. This symbol occurs on the coins of the Āndhras and other dynasties and has frequently been called a *chaitya* by numismatists. The seals, however, point to a different explanation. In seal No. 15, which issued from a shrine of Śiva on the Kālāñjara hill, the *liṅga* is placed on the top of this symbol, from which it may be inferred that it is probably a representation of the hill itself. In seal No. 16, which also came from Kālāñjara, the two symbols stand apart, but it is obvious that here, too, the same hill is meant. Perhaps the same remarks apply also to the symbol on the four Āndhra seals (Nos. 25-28).

Among the Vaiṣṇava symbols may be noticed the well-known device of Lakṣmī and the elephants (Nos. 35, etc.), the conch (*śaṅkha*) and the wheel (*chakra*). There is one emblem which so far has baffled identification. It occurs also on two Basārh seals¹ and has been described as an ornamental *triśūla*. Among the Bhītā seals it occurs on several specimens. In No. 36 it has a conch on one side and a wheel on the other, which are both Vaiṣṇava. In another seal (No. 44), however, it is combined with a bull and wheel. In other examples (Nos. 39, 85 and 86) it stands alone.

As regards palæography no observations seem to be called for here beyond the fact that the legends on the Gupta seals exhibit, in some cases, the eastern type of that script. Cf. *l* in *Kālēśvara* (No. 14), *Lālasya* (No. 46), *Bilvadāsa* (No. 84), and *Bhadilasya* (No. 94) and *h* in *Sāmāharsa* (No. 42), *Vithusi(n)ha* and *Nityasīha* (No. 92). All the seals are illustrated with the exception of eleven sealings which are too obliterated to show anything in a photograph. Of the seal moulds (Nos. 1-13) direct representations are published.

I.—SEALS.

1. Terracotta disc, circular; diam. $1\frac{1}{2}$ ". No emblem. Legend in raised reversed letters of about the 3rd Century B. C. *Śahijitīyē nigamaśa*. The reading is doubtful. The second word appears to be the genitive of *nigama*, the termination *sa* being occasionally changed to *śa* in ancient records.² If this assumption is correct, the house in which the seal was discovered may mark the site of the office of a *nigama* or corporation. The reverse is plain. 7, 0; 2' below foundation of walls.

¹ *A. S. R.*, 1903-04, Pl. XL, 3, and Pl. XLII, 48. It has also been called *Kūrmachakra*. Cf. *A. S. R.* 1906-7, Pl. XX, 1. Rapson, *Coins of the Andhras*, CLXXVII, regards it as a *nāga* symbol.—*J. H. M.*

² Cf. *taśa cku iyañ mūlā* in Kalsi Edict XII; *Ep. Ind.*, Vol. II, p. 462. Also the form *Nandivadhāśa*; Franke, *Pali und Sanskrit*, p. 98.

2. Seal die of ivory with conical top, pierced with hole for suspension. The inscribed surface is oval ($1\frac{1}{4}'' \times \frac{7}{8}''$) and surrounded by a beaded line. Device of tortoise, crawling l. Legend in northern characters of the 4th or 5th century A. D. *Śrēṣṭhī Jayavasuda[h]*.¹ "The banker Jayavasuda." The device of a tortoise would seem to indicate that the owner of this seal was a worshipper of Vishnu, who in his second incarnation appeared in the form of a tortoise **19**, *p*; upper floor.

3. Similar. Inscribed surface conical, $1\frac{1}{2}'' \times \frac{7}{8}''$, without border-line. Symbols of conch (*śaṅkha*) and wheel (*chakra*), both Vaiṣṇava. Legend in small northern letters of the 4th or 5th century A. D. *Dharadāsasya Samddhiyaśa[h] putrasya* "Of Dharadāsa,² the son of Samddhiyaśas." Samddhiyaśas (famous for peace) is a curious name. The doubling of *dh* after *sam* is irregular. **30**, *b*.

4. Signet ring of bronze ($\frac{1}{4}''$). Inscribed area oval $\frac{7}{8}'' \times \frac{1}{16}''$. Bull couchant, l. In lower part, legend in northern characters of the 4th or 5th century A. D. *Rudra(ā)cha(ā)rya*. The owner was a Śaiva and the symbol of a bull may have been chosen in allusion to Rudra, a name of Śiva. **31**, *a*; under-ground chamber.

5. Ivory seal shaped like the lid of a casket with handle above. Circular; diam. $1''$. Conch lying on side. Legend in late Kushana script *Na(ā)gadēasya*, which probably stands for *Nāgadēvasya*. The choice of a conch for the seal device would point to the Vaiṣṇava faith of Nāgadēva. **12**, *c*; 2' above floor.

6. Similar. Circular; diam. $\frac{1}{16}''$. Conch on side. Below, legend in northern characters of 4th or 5th century A. D. *Puś(śh)yavṛiddhisya*.³ **23**, *a*; 5' above level of early floor.

7. Soapstone seal-die with a perforated handle. Ht. $1\frac{1}{4}''$. Inscribed surface oval, $1\frac{1}{2}'' \times \frac{3}{4}''$, with single border line. At top, ornamental wheel with pair of conches on pedestal. Below, legend in northern characters of the 4th or 5th century A.D. *Gauridāsa*. The conch and the wheel are both emblems of Vishṇu, of whom Gauridāsa would appear to have been a votary. In *Gau* we find, instead of the usual right-hand stroke of *au*, a hook attached to the foot of the vertical of that letter. This particularity is also exhibited by several legends occurring on the Basāṛh seals.⁴ The name Gauridāsa also occurs on a Basāṛh seal⁵ of about the same date, where he is called a Kulika. **29**; over 3rd floor.

8. Ivory seal-die, similar to Nos. 5 and 6. Circular; diam. $\frac{1}{16}''$. Conch on side. Legend in northern characters of the 4th or 5th century A.D. *Nāgabhadrasya*. High Street

9. Terracotta seal-die with perforated top. Inscribed surface nearly oblong, $1'' \times \frac{1}{8}''$. Star. Legend in reversed northern characters of circa 5th century A. D. *Jitam*⁶ *Manōratha*. The word Manōratha seems to be the name of an individual. Cf. *Dharmō rakshati rakshita* of one of the Basāṛh seals.⁷ Area of **29**; 3' below surface of mound

¹ This sign appears, in reality, to be the left portion of the genitive termination *śya*, but the nominative case *Śrēṣṭhī* leaves no doubt that the genitive ending is not wanted.

² Cf. Dharmasēna, a Valabhi prince (Rapson, *Ind Coins*, p. 27)

³ Cf. Pushyabhūta (Fleet, *Gupta Inscriptions*, Intro., p. 15), and Pushyamitra (*ibid* p. 55).

⁴ *A. S. R.*, 1903-04, p. 104

⁵ *Ibid.* pl. XLI, 28.

⁶ This is a benedictory term meaning victory to some deity.

⁷ *A. S. R.*, 1903-04, pl. XLI, 22.

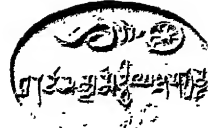
EXCAVATIONS AT BHITA.



1



2



3



4



5



6



7



8



12



9



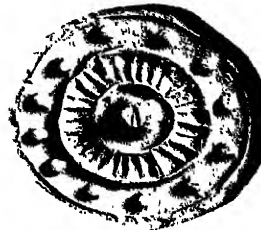
10



11



13^a



13^b



115



13^c

SEALS.

10. Terracotta seal-die with perforated handle at top. Inscribed surface oblong, $1'' \times \frac{7}{8}''$. Trident (*trīśūla*) in middle. On r., legend in Kushāṇa letters *raga*. 48; 11' below surface.

11. Similar. Slightly oval, $1\frac{1}{4}'' \times 1\frac{5}{8}''$. Single border line. Above, uncertain symbol (*svastika*?). Below, in reversed northern characters of the Gupta period, *Vichhī*. *Vichhī* or *Vichhīgrāma* appears to have been the ancient name of the Bhīṭā site. 46, b; 3' above floor.

12. Similar. Oval, $1\frac{3}{8}'' \times 1\frac{9}{16}''$, with scalloped border line. No legend. Symbol resembling a trident. 30; 4' above floor.

13. Three terracotta moulds with projecting perforated handles. No legends. Designs of a lotus, etc. 27, 30 and 6, respectively.

II.—SEALINGS.

a. Religious.

14. Oval, $2\frac{1}{8}'' \times 1\frac{5}{8}''$, with single border line.

Trident-axe. To its r., a diagram of dots.¹ To its l., a figure which cannot be identified. At foot of trīśūla, a wavy line, below which is a horizontal line. In lower portion, legend in eastern Gupta characters:—*Kālēśvaraḥ prīyatām*. "May Kālēśvara be pleased."² The *śva* of *Kālēśvara* is reversed, as it would have been in the die.

According to the *Skandapurāṇa* Kālēśvara is the name of a *Śiva-linga*, and this tablet would seem to have been presented as an offering at some shrine of Śiva at Bhīṭā. Some votive seals, which were found at Sunet near Ludhiana, bear on one side the name of the donor and on the other that of the deity. In this seal the reverse is plain and the name of the donor omitted. Alley, to the S. W. of 13; 5½' below surface.

15. Oval $\frac{3}{4}'' \times 1''$. *Śiva-linga*, with umbrella on one side and trident on other. Below this, pile of round objects. Across the seal is a waved line, similar to that in No. 14. In lower portion, legend in northern characters of the Gupta period *K(ā)lañjarabhaṭṭarakasya*. "Of the lord of Kālañjara." The *la* of *Kālañjara* was not reversed in the mould. Kālañjara is, of course, the name of a hill in Bundelkhand, which has been the favourite resort of Śaiva *tapasvins* from very early times.³ The pile of round objects depicted below the *linga* is probably a representation of the hill itself.⁴ The seal issued from a Śaiva temple on the Kālañjara hill, though no remains of a temple exist on the hill now. 29, g; between 2nd and 3rd floors.

16. Oval, $1\frac{1}{2}'' \times 1\frac{1}{4}''$. *Śiva-linga* on pedestal with representation of hill on one side and trident-axe on the other. Below, legend, in north-eastern characters of the Gupta period:—*K[ā*]la[ñ*]jara*. This is another sealing which arrived in Bhīṭā with a document from Kālañjar. 13; upper floor.

¹ Cf. similar device on No. 15.

² Similar dedicatory formulas ending in *prīyatām* or *prīyantām* occur in four Kushāṇa inscriptions on Mathurā sculptures. Cf. *Ep. Ind.*, Vol. I, p. 386; *ibid.*, IX, p. 240; Vogel, *Catalogue of the Mathura Museum*, C. 13.

³ *C. S. R.*, XXI, p. 20ff.

⁴ This device occurs, also, on the coins of Śivalakura and Viḷivāyakura, where it is called a *chaitya*.

17. Oval, $1\frac{1}{4}'' \times \frac{7}{8}''$, with beaded line around. Male figure with two arms seated on pedestal. Uncertain objects in hands. Foliage (?) or flames over head and shoulders. Legend in northern characters of the 4th or 5th century A. D. *Bhadrēśvara*. This is the name of the *Śiva-linga* of Kalpagrāma,¹ according to the *Vāmanapurāṇa*, Adhyāya 46. The male figure may therefore be Śiva in the Bhadrēśvara aspect. The reverse of this seal is plain like that of No. 14.

18. Circular; diam. $\frac{1}{2}''$. Vase² on pedestal. Below, legend in northern characters of the Gupta period *Sarasvatī* (the goddess of speech). Reverse plain. 27; 5' below surface. Another copy from the same matrix was found in spoil earth.

19. Nearly circular; diam. $1\frac{1}{2}''$. Legend in Kushāṇa characters *Na[m*]di*, which is said to be an epithet of Śiva, Śiva's attendant, Vishnu, etc. Below, *svastika* and symbol resembling vase (*ghata*). On the margin, crescent and sun. Reverse plain. A similar sealing from a smaller mould was found in 7, on level of lower floor in 13 13, n; lower floor

20. Circular disc with plain reverse. Diam. $\frac{1}{4}''$. *Svastika* and conch. Legend in Kushāṇa characters *Na[m]disa* "of Nandi." 13, n; lower floor.

21. Nearly oval, $1'' \times \frac{3}{4}''$; much worn. Symbol like wheel. Below, legend in northern Gupta characters.

L. 1. [*Namō Bhagava*] *tē Vā-*

L. 2. *sudē* [*vāya*].

The reverse is blank. The sealing is interesting, for it shows that Bhītā possessed a temple of Vāsudēva in the Gupta period. We know from the Bēsagar inscription that the worship of Vāsudēva was well known in the 2nd or 3rd century B. C. 24, b.

22. Oval, $1\frac{5}{8}'' \times 1''$, pointed at top. Male figure standing facing. R. hand stretched out. Below it, symbol² resembling trident. L. hand on hip. Near l. foot, conch. The figure and both symbols stand on pedestals. In exergue there was probably a legend which is altogether effaced. The figure seems to be that of Vishnu. 19, k; upper floor.

23. Oval, $1\frac{1}{2}'' \times 1\frac{1}{4}''$. Two-armed male figure, standing facing. R. hand stretched out as in No. 22 and l. hand on hip. Folds of drapery falling on both sides. Legend in northern characters of the Gupta period: *Bhagavatō ma[h]ē* [*śvarasya**]. The second word of the legend is only slightly preserved and the reading *Mahēśvarasya* is a problematic one. *Bhagavat* occurs as an epithet of Śiva in one of the Basārṇ seals.³ 7; 5' below surface.

24. Forty-five impressions from the same mould. Slightly oval, $\frac{11}{16}'' \times \frac{9}{16}''$. Legend in five lines, Buddhist creed. The characters belong to the northern class of alphabets prevalent in the 6th or 7th century A. D. Area of house 30; 4' below surface of mound.

b. Sealings of rulers.

25. Circular; diam. $\frac{15}{16}''$. In field, pile of balls or dots with a post on each side, a waved line below and sun and crescent above, these being the symbols which

¹ This place cannot be identified.

² Cf. Rapson's *Coins of the Andhras and W. Kshtrapas*, Pl. V., 105.

³ *A. S. R.*, 1908-04, p. 111, No. 32.



14



15



17.



18



19



20



21



22



23



24



25



26



27



28



29



30



31



32



33



34

SEALINGS

characterise the coins of the Andhra and Kshatrapa dynasties. Around the margin, legend :—*Śrī-Vindhyabēdhana-mahārājasya Mahēśvara-Mahāsēnātisṛishṭa-rājyasya Vṛishadhvajasya Gautamiputrasya*. The letters are very small but neatly cut and finely preserved. In respect of execution the seal excels any object of this class which has yet been discovered in India. The characters closely resemble those of the Jaggayyāpēta¹ inscriptions and belong, like them, to the 3rd or 4th century A. D. The language is Sanskrit. I propose to translate the legend as follows :—

“Of the illustrious Mahārāja Gautamiputra Vṛishadhvaḥ, the penetrator of the Vindhyas, who had made over his kingdom to the Great Lord Kārttikēya.”

Vindhya-bēdhana or more correctly *Vindhya-vēdhana*² is a curious appellation, and I am unable to find a parallel in Sanskrit literature.

Vṛishadhvaḥ, to whom this seal belonged, is not known from any other source.

The matronymic Gautamiputra shows that he was connected with the other princes of that denomination, e.g., Gautamiputra Śrī Śātakarni, G. Śrī Yajña Śātakarni and G. Viḷivāyakura. The appellation *Mahēśvara Mahāsēn-āti-sṛishṭa-rājya*³ is significant. It seems to indicate that in ancient times there may have existed a pious custom, according to which rulers on the occasion of their accession entrusted their kingdom to their *ishtadēvatā* and considered themselves as mere agents.⁴ Mahāsēna, to whom Vṛishadhvaḥ made over his rājya, is the well-known god Kārttikēya, a son of Śiva and Pārvatī; and the name Vṛishadhvaḥ would seem to be only a second name assumed by the king on the occasion of his coronation in respect to the god Śiva. 19, k; upper floor.

26. Oval, $1\frac{1}{4}'' \times 1''$. Bull standing l.; crescent under his neck; woman standing in front; her r. hand outstretched, and l. on hip. Behind the bull, a post or thunderbolt (*vajra*). In exergue, bow with arrow and pile of balls as in Andhra coins. Across the middle of the field, legend in northern characters of about the 2nd or 3rd century A. D.

Mahārāja-Gautamiputrasya Śrī Śivam[ē]ghasya.

“Of the illustrious Mahārāja Gautamiputra Śivamēgha.” It is clear that Gautamiputra was the name of a line of rulers and Śivamēgha is a scion of this line. The bull and crescent point to the king's leaning towards Śaivism. 7; 5' below surface.

27. Circular: diam. $1\frac{1}{4}''$. Scene and symbols same as on No. 26, but transposed. Legend in similar characters [*Rā*]jña *Vāsasu (Vāsishṭhi) puttrasya Śrī-Bhīmasēna [sya]* “Of the illustrious Rājā Vāsishṭhiputra Bhīmasēna.” Bhīmasēna is a new addition to the Vāsishṭhiputra line of Andhra rulers. 7; on level of lower floor in 13.

28. Much worn specimen. Circular; diam. $1\frac{1}{8}''$. Same legend and types as on No. 26, but not from the same die. 42; 2' below surface.

¹ Burgess *Amaravati and Jaggayyapeta Buddhist stupas*, p. 110, Pl. LXII.

² *Vindhya* and *vēdhana* are both derived from the root *vyadh*, to pierce, and it is possible that this compound may have been chosen for the sake of some sort of a pun.

³ A temple of Kārttikēya under the name of Śvāmī Mahāsēna is mentioned in the Bilsar pillar inscription. Fleet, op. cit., p. 44.

⁴ I am unable to quote a reference to any such custom in the literature, but Mr. Natesan, Archaeological Scholar, has drawn my attention to the fact that Mahārāja Mātēṇḍa Varman of Travancore actually performed a similar ceremony in the middle of the 10th Century A. D. (Menon's *History of Travancore*, pp. 170-71). As this ceremony took place in a shrine of Padmanābha (*Viṣṇu*) Mahārāja Mātēṇḍa changed his name to Padmanābhadasa. This custom is still kept up in Travancore.

29. Lump of clay with two impressions:—

(a) Irregular area, $\frac{7}{8}'' \times \frac{3}{4}''$. Standard with streamers. This symbol also occurs on one of the Basāṛh seals.¹ Uncertain devices on each side of the flag. Legend in northern characters of the 2nd or 3rd century A. D. [Bhaṭṭā]raka-mahārājādhirāja. The name of the Mahārāja is missing.

(b) Couchant bull. Above, crescent and sun. No legend. 23, d; 11' below surface.

30. Oval area, $1\frac{1}{2}'' \times 1\frac{1}{5}''$ with a border line. Reverse plain. Bull couchant, facing l. Below it, horizontal line. In exergue, two lines of writing in Central Indian characters of the 4th or 5th century A. D.²

L. 1. *Mahādēvyā[h]Śrī.*

L. 2. *Rudramatyāḥ.*

“Of Mahādēvī Rudramatī.” Rudramatī is not known from any other source. The title *Mahādēvī* was applied in the Gupta period to the wives of paramount sovereigns and in some cases also to the wives of Māhārājas.³ 42; 2' 5" below surface.

c. Sealings of officials.

31. Oval, $1'' \times \frac{5}{8}''$. In the upper part, lion sejant, facing l., on a double horizontal line evidently meant for pedestal. In front of the lion, symbol like trident.⁴ Below, legend in northern characters of the 4th or 5th century A. D. *Sēnā-*
(ā) *pati In..*

The second syllable of the name is not completely preserved. Sēnāpati has in literature the sense of “Lord of the Army.” This rank is inferior to that of *Mahāsēnāpati*, which is used in inscriptions in connection with the titles of *mahā sāmanta*, *mahārāja*,⁵ etc. 9, k; upper floor.

32. Circular; diam. $1\frac{3}{4}''$. Divided into two by a horizontal line with up-turned ends. In the upper portion, Lakshmī,⁶ facing, with elephants standing on lotuses. R. hand of the goddess raised above elbow; l. hand rests on a bird (?), perhaps Garuḍa. Below, legend in eastern characters of the Gupta period:—

L. 1. *Mahāśvapati-mahādaṇḍa-nāyaka-Vishnura—*

L. 2. *kshita-pādānugrihīta-kumārāmātyā-adhikaraṇasya.*

“(Seal) of the office of the councillor of the heir-apparent, a recipient of the favour of Mahāśvapati, Mahādaṇḍanāyaka Vishnurakshita.” The real import of the expression *pādānugrihīta* (lit. favoured by the feet of) is not known. Dr. Vogel thinks it possible that it indicates the relation of a son to a father, as does *pādānudhyāta* in title-deeds. This conjecture receives some colour from the fact that the name of the owner of the seal—the Kumārāmātya—is not mentioned, it being considered sufficient to state the name of his father. This peculiarity is

¹ *A. S. R.*, 1903-04, Pl XLII, 54.

² Cf. Udayagiri inscriptions, Fleet, op. cit. Pl II, B.

³ Fleet, op. cit., p. 8, f. n 2

⁴ Rapson, op. cit., p CLXXVI, No. 7.

⁵ Fleet, op. cit., p 41.

⁶ In the Bhitā and Basāṛh sealings, Lakshmī does not stand on a lotus. This is uncanonical. cf. *Padmasthā padmahastā cha gay-ōṭkshipta-ghaṭaplatā Śrīh padma-malinī chaiva Kalikākṛitir-ēva cha.* Hēmādī, *Chaturvar-gachintāman*, Vratākhaṇḍa, p 78.

noticeable in two Chambā title-deeds, where certain landholders are described as the sons of their fathers.¹ It is curious to find the functions of *mahāśva-pati* (Chief Officer of Horse or Cavalry) and *mahādaṇḍa-nāyaka* (Chief Judge or Chief Officer of Police) both combined in Vishṇurakshita. 19 ; 2' above upper floor.

Ten specimens obviously from the same matrix also came to light in houses 13 and 19 in the débris accumulated on the upper floor.

33. Oval, 1" × 3". In the upper part, wheel in front elevation and conch on side. Below, legend in northern characters of the 4th or 5th century A. D. [*Aśva*] *pati-Jayāntas[ya]*. "Of the Aśvapati Jayānta." Aśvapati, though inferior in rank to *mahāśva-pati*, must still have been an officer of importance.² 19, k ; upper floor.

34. Oval, 2" × 1½". Lakshmi with elephants as on No. 32. Below, legend in eastern Gupta characters of the 5th century A. D.:—

L. 1. *Mahārāja-Saṅkarasimha*.—³

L. 2. *Pādīy-āyukta*

L. 3. ... [dhi]karaṇa-[sya]

"Seal of the office...Āyukta of His Highness Mahārāja Saṅkarasimha. The seal is broken on the edges and portions of the second and 3rd lines are missing. The title Āyukta is the same as "Āyuktaka" of title-deeds.⁴ 30, courtyard ; upper floor.

35. Oval, pointed at top, 3" × 2½". Lakshmi standing on lotus, with elephants. Her r. hand holds a lotus (*padma-hastā*). On either side of her a dwarfish figure on lotus, with folded hands. Similar figures occur on Basārh seals, Nos. 8 and 13, pouring out coin-like objects from pots. Legend in northern characters of the 4th or 5th century A. D. [*Ku*] *mārāmāty-ādhikarāṇasya*. "(Seal) of the office of the councillor of the Heir-Apparent." Between *na* and *sya* of the legend there is an indistinct sign. 13 ; above the upper floor.

36. Oval, 1" × ¾". Above, symbols of wheel and conch with uncertain symbol between. The other two symbols are Vaishṇava, and the intervening symbol must also be a Vaishṇava emblem. But I am unable to identify it. Below, legend in northern characters of the 4th or 5th century A. D.:—*Amāty-Īśvara-chandrasya*. "Of the minister Īśvarachandra." In front of 6.

37. Sealing with two impressions:—

(a) Oval, 1" × ⅝". In upper part, fan-tailed peacock, as on coins of Kumāragupta I and Skandagupta, standing on two horizontal lines with upturned ends. In exergue, legend in northern characters of the 4th or 5th century A. D. *Amātya-Dha [r] madēvasya*. "Seal of the minister Dharmadēva."

(b) Nearly circular, diam. ¾". *Nandipada*. This symbol is found on the coins of Kadphises II⁵ in association with Śiva, his bull and his trident (*triśūla*). Legend, *Vārasya*.⁶ 48, i ; 10' below surface.

¹ Vogel, *Antiquities of Chamba State*, pp. 149 and 179.

² *Ind. Ant.*, XV, p. 9, note 52.

³ For the substitution of the guttural nasal for the *anusvara* in seals of the Gupta period see *A. S. R* 1903-4, p. 103.

⁴ Fleet, *op. cit.*, p. 159, f.n. 4.

⁵ See Smith, *Cat. of the Coins in the Ind. Mus.*, Pl. xi, 4 and 6.

⁶ This legend with the symbol occurs also on Nos. 40, 47 and a few others.

38. Token, with rectangular space for legend, $\frac{5}{8}$ " \times $\frac{3}{4}$ ". Legend *Amātya-Dharmadēva*. This is an impression from another seal of the same minister who figures on the previous seal. Since the reverse does not exhibit marks of the tape, it is clear that this sealing was not attached to a letter, but used as a token. West of 4; 3' below the surface.

39. Oval, $\frac{3}{4}$ " \times $\frac{7}{16}$ ". Uncertain symbol, as on No. 36. Legend in Kushana characters:—*Amātya-Bōlasya*. "(Seal) of the minister Bōla." 19, k; upper floor. The seal-die must have been in use for a considerable time, as all the other sealings found in company with this one were of Gupta date.

40. Oval, $\frac{5}{8}$ " \times $\frac{7}{16}$ ". Uncertain symbol, as on Nos 36, 39, etc. Below, legend in northern characters of the 2nd or 3rd century A. D. *Amātya-Nāgadām*. "(Seal) of the minister Nāgadām." Combined with traces of another impression with *nandipada* and legend *Vārasya*, as on No. 37. It is interesting to find this legend on seals separated by one or two centuries. Found with one or more specimens from the same die in 45; 4' below surface.

41. Broken, oval, $\frac{3}{4}$ " \times $\frac{1}{2}$ ". Conch on side. Below, legend in northern characters of the 4th or 5th century A. D. *Amātyak-Īśvar-a(ā)na[na]*. *Amātyaka* is the same as *Amātya*. Hence "the minister Īśvarānana." The last syllable of the name is doubtful. This impression is combined with another which presents a *nandipada* symbol and a legend which is altogether destroyed. 45, e; 2' below floor of room d.

42. Token. Reverse plain. Oval, $1\frac{3}{4}$ " \times $1\frac{3}{4}$ ". In the upper part, Lakshmi standing facing, on full-blown lotus. Both hands raised above elbow. R. hand holds conch, and l. the bird *garuḍa*. On either side of the goddess, elephant pouring water over the conch and the bird. Below the elephants, vases with water or flowers falling from them. Below, separated by a double horizontal line, legend in eastern Gupta characters of about the 5th century A. D.

L. 1. *Sāmāha* (P) *rsa* (P)-*vishay-ādhi*—

L. 2. *karanasya*.

"(Seal) of the office (or court) of the district¹ of *Sāmāharsa*." The name of the district cannot be correctly read. *Sāmāharsa* is the nearest approach, and it is not possible to discover its modern representative. The reverse exhibits, not the grooves of the tape, but marks of the fingers on which the clay was held in the process of stamping. This fact combined with a hole through the length of this sealing appears to show that the sealing was attached to a document by means of a loose string. 29, g; above 3rd (Gupta) floor.

43. Circular; diam. $1\frac{1}{4}$ ". Ornamental wheel on pedestal. Below, legend in western characters of the Gupta period:

L. 1. *Mahādandanāyaka*.

L. 2. ...*śh*...*r*...*i*

"The Chief Officer of Police" His name is illegible. The reverse is shaped like that of No. 42. 13; upper floor.

44. Oval, $1\frac{1}{2}$ " \times 1". Bull standing, facing, with round object between horns. To his r., uncertain symbol; to l., wheel in side elevation. All three stand on altars.

¹ The head of a district was called *Vishayapati*. Vide Vogel, *Antiquities of Chamba State*, p. 111.



SEALINGS

In exergue, legend in northern characters of the 4th or 5th century A. D.:—*Danḍanāyaka-Śrī-Śaṅkaradattasya* “(Seal) of the officer of police, the illustrious Śaṅkaradatta.” **23**, e; 6½' above floor.

45. Oval, 1" × ¾". Bull recumbent to l. Uncertain object before him. Below, legend in eastern Gupta characters of the 4th or 5th century A. D.:—*Danḍanāyaka-Grāmabalasya*.

“Of the officer of police, Grāmabala.”¹ **23**, k.

46. Oval, 1½" × ¾". Bull recumbent to l. Below, legend in eastern Gupta characters of the 4th or 5th century A. D.:—*Danḍanāyaka-Lālasya*. “Of the officer of police Lāla.” The second syllable of the name is doubtful. **19**, k; upper floor.

47. Lump of clay with two impressions:—(a) Oval, 1" × ¾". Humped bull couchant to l. Below, horizontal line. In lower part, legend in northern characters of the 4th or 5th century A. D.:—[*Danḍa*]nāyaka-*Kēśavadāsa*[*syā*]. “Of Kēśavadāsa, the officer of police.” (b) Oblong, 7⁄8" × 5⁄8". *Nandipada* with legend *Vārasya*, as on No. 37. **28**; 4' 8" below surface.

48. Fragment of sealing. Bull couchant to l. Below legend in northern characters of the 4th or 5th century A. D. [*Danḍa*]nāyaka-*Yajñavī* [*rya**]. “The officer of police, Yajñavīrya.” The last syllable of the name is missing. There is enough space for one syllable. **19**, k; upper floor.

49. Broken sealing. Oval, small axis 1¼". Humped bull, recumbent to l. Behind him, radiate circle, perhaps the sun. Below, separated by a horizontal line, legend in northern characters of the 4th or 5th century A. D.:—[*Danḍanā*]yaka *Um* (?) *masya*. “Of Umma, the officer of police.” **7**; 6' below the surface.

50. Nearly circular, diam. 5⁄8". Uncertain device in middle of field. Below, legend in Kushāṇa characters:

Sa(ē) napatasa danḍanāya [*kasa**]. “(Ot) the officer of police aka .. son of . . Sēna.” The rest of the legend is entirely worn away. **7**, h; in débris.

51. Oval, 1½" × ¾". Bull standing, facing, with round object between horns.² Below, legend in northern characters of the 4th or 5th century A. D. *Danḍanāyaka-Vaṇśa* (?) *syā*.³ “Of the police-officer Vaṇśa.” Found with another copy from the same die in **19**, k; upper floor.

52. Oval, 1" × 1½". Bull recumbent, to l. Below, legend in eastern Gupta characters of the 4th or 5th century A. D.: *Pratīhāra-rvviśākharudradāma*...⁴ There is a cut in the sealing between *ra* and *rvvi*, which has carried away one syllable. Found with another copy in **19**, k; upper floor.

53. Oval, 1½" × 9⁄16". Duck standing, facing front, with uplifted tail. To its l. symbol like that on a Basārh seal.⁵ To r., uncertain object. Below, illegible legend of Gupta date. The only legible syllables are *Dhana*. **19**, k; upper floor.

¹ Examples of names ending in *bala* (strength) are common enough in literature. Cf. Nāgahala, Dēvabala, Pañchabala, etc.

² Cf. Rapson, *Coins of the Andhras and W. Kshatrapas*, Pl. XII, 326.

³ The reading is doubtful. If *Vaṇśa* is correct, the legend may possibly mean “Of the race or assembly of *danḍanayakas*.”

⁴ For this title see Vogel, *Antiquities of Chamba State*, Vol. I, 122.

⁵ A. S. R., 1903-04, Pl. XLI, 26.

54. Right half of sealing. Oval; small axis $\frac{5}{8}$ ". Bull recumbent to l. Legend in northern characters of the 4th or 5th century A. D.: *Gaṅgadēvasya*. "Of Gaṅgadēva." His title is broken away. 19, k; upper floor.

55. Lump with two impressions :

(a) Oval area, $1" \times \frac{5}{8}"$. *Nandipada*. Legend in eastern Gupta characters of the 4th or 5th century A. D.:—*Kulikanigama(sa)*. "Of the corporation of Kulikas." From the mention of Kulikas among State officials in Chambā title-deeds Dr. Vogel concludes that Kulika is the name of a tribe, not a generic name meaning a merchant, as supposed by Dr. Bloch, and that the people of this and other tribes were employed by the rulers of past days as Captains of mercenaries.¹

(b) Oval of about the same size. Part of lion (?). Legend quite obliterated. 19, k; upper floor.

56. Oval, $\frac{3}{4}" \times \frac{1}{2}"$; heading around and divided in middle by a band of four horizontal lines. In upper half, conch, *svastika* and *chaitya* diagram. Below, legend in eastern characters of about the 3rd century A. D.:—*Kulikasa*. Found with three other copies from the same matrix in 48, n; 10' 9" below surface.

d. Sealings of guilds.

57. Nearly circular; diam. $\frac{7}{8}"$. No device. Legend in Kushāṇa characters *na(i)gama*. "The guild." 19, a; lower floor.

58. Similar. Diam. $\frac{1}{8}"$. Legend in corners of square:—*nigamasa*. "Of the guild." The script belongs to the Kushāṇa period. 30; lower floor.

59. Fragment of sealing. Legend in Kushāṇa script in recessed square: *ni[gama*]*. 19; lower floor.

60. Circular; diam. $\frac{3}{4}"$. Reverse plain. Legend in corners of square:—*nigamasa* in Kushāṇa script. 45, f; 4' below surface.

61. Two impressions:—

(a) Irregular surface $1" \times \frac{5}{8}"$. *Nandipada*. Legend in northern Gupta characters:—*nigamasya*.

(b) Device worn away. Legend:—*dēvasya*. 45, e; 2' below bottom of room d.

62. Two impressions:—

(a) Same as No. 40(a).

(b) *Nandipada* and [*ni**]*gamasya*.

e. Sealings of private individuals.

63. Circular; diam. $\frac{3}{8}"$. Legend in characters of about the 1st century B. C. *Pusasa* "of Pusa." Cf. Legend in the next sealing. 45, d.

64. Circular; diam. $\frac{1}{8}"$. Reverse blank. Legend of pre-Kushāṇa date:—*Pusamitasa*. 19, j; lower floor.

65. Circular; diam. $\frac{9}{16}"$. Ujjain symbol. Legend on border in Brāhmī of circa 1st century B. C.:—*dēvasa*. 45, d; below bottom of walls.

¹ *Antiquities of Chamba State*, Vol. I, p. 114.

66. Circular; diam. $\frac{7}{8}$ ". Vase with foliage. Legend in Kushāṇa characters illegible. **42**; 2' below surface.

The following sealings, unless stated to the contrary, should be taken to be inscribed in northern characters of the 4th or 5th century A. D.

67. Irregular area, $\frac{5}{8}$ " \times $\frac{1}{2}$ ". Legend *Bhadraka*. **48, c**; 10' below surface.

68. Circular; diam. $\frac{5}{8}$ ". Legend in Kushāṇa characters round margin:—*Dhāarakaya*, perhaps *Dhāarakōyam*. In exergue, *svastika*. Find-spot unknown.

69. Similar. Same legend. **40**, 8' below surface.

70. Similar; diam. $\frac{5}{8}$ ". Legend around a *svastika* in Kushāṇa characters:—*Jayasēnasa*. **7**; on level of early floor in **13**.

71. Rectangular area, $\frac{3}{4}$ " \times $\frac{1}{2}$ ", with beaded border-line. Legend in Kushāṇa characters:—*Bhutakasa*. "Of Bhutaka." **40**, western portion; $1\frac{1}{2}$ ' below level of early floor (green in plan).

72. Circular; diam. $1\frac{1}{4}$ ". *Svastika* with tortoise (?) on either side. Below, separated by a band of horizontal lines, in Kushāṇa Brāhmī:—*Bhubhulasa*. "Of Bhubhula." Found with two other copies in **23, e**; $12\frac{1}{2}$ ' below surface, near level of floor.

73. Nearly circular; diam. $\frac{3}{4}$ ", surrounded by dotted line. Bow and arrow as on Andhra coins. Legend in Kushāṇa characters:—*Gagasa*. In exergue, uncertain symbol. **13, d**; lower floor.

74. Oval, 1 " \times $\frac{5}{8}$ ". No device. Legend:—*Virūḍhanāgāyāh*. "Of Virūḍhanāgā." Found with another fragmentary copy in **19, k**; upper floor.

75. Oval, $1\frac{5}{8}$ " \times $\frac{7}{8}$ ". Bull recumbent to l. In front, woman standing facing, her l. hand on hip and r. outstretched towards erect trident battle-axe.¹ Below, legend in very small and fragmentary letters. **19, k**; upper floor.

76. Two impressions:—

(a) Oval 1 " \times $\frac{5}{8}$ ". Bull recumbent to l., with post (?) in front. Legend:—*Badhusama* (?)

(b) *Nandipada*. Legend:—*Vārasya*. As on No. 37. **12, d**; upper floor.

77. Two impressions:—

(a) Irregular area, $1\frac{3}{4}$ " \times $\frac{3}{4}$ ". Bull recumbent to l. Below, legend:—*nanda*.

(b) Oval, $1\frac{1}{4}$ " \times $\frac{3}{4}$ ". Legend:—*vārah* **23, a**; 2' below surface.

78. Oval, 1 " \times $\frac{3}{4}$ ". Bull (?) recumbent to r. Below, line with ends turned upwards. Legend:—*Rudrasin(m)ha*. **19, k**; upper floor.

79. Oval, 1 " \times $\frac{1}{2}$ ". Bull recumbent to l. Below, three horizontal lines of diminishing lengths. Legend illegible. Reverse plain. **22, e**; floor.

80. Oval, $1\frac{1}{4}$ " \times $\frac{7}{8}$ ". Lion *sejant*, facing l. on horizontal line with upturned ends. Legend:—*[I]ndradattaḥ*.

81. Similar 1 " \times $\frac{5}{8}$ ". Similar device. Legend:—*Vishnuchandra*. Found with another copy in **19, k**; upper floor.

82. Oblong, $\frac{7}{8}$ " \times $\frac{1}{2}$ ". Device similar. Below lion's neck, uncertain symbol.² Legend obliterated. **19, k**; upper floor.

¹ For the device Cf. woman standing in front of deer on a Kuninda coin. Smith, op. cit., Pl. XX, 12.

² Cf. Rapson, op. cit., Pl. V, 105.

83. Oval, $1\frac{1}{8}'' \times \frac{7}{8}''$. Peacock standing to l. with uplifted tail. Below, legend:—*Śrī-Skandaśūrasya*. **19, k**; upper floor.

84. Oblong, $\frac{9}{16}'' \times \frac{3}{8}''$. Fish on side. Legend:—*Bilvēdasā*. **45, a**; 3' below surface.

85. Oval, $\frac{3}{4}'' \times \frac{5}{8}''$. Uncertain symbol. Legend:—*Vithusi[m*]ha*.¹ Reverse-plain. **12, d**; upper floor.

86. Oval, $1\frac{3}{8}'' \times 1\frac{1}{8}''$. Same symbol as in No. 79. Legend:—*Vasuda(?)sya*. West of gate; $5\frac{1}{2}'$ below the surface.

87. Oval, $1\frac{1}{8}'' \times \frac{3}{4}''$. Wheel with one conch. Below, horizontal line with ends turned upwards. In lower portion, legend in thick stumpy characters:—*Bhīmapā [lasya]* **6**; 9" below surface.

88. Oval, $1\frac{1}{8}'' \times \frac{3}{4}''$, with beaded border-line. Wheel. Below, two horizontal lines. Legend in lower part:—*Padmanābha*. The device of wheel may have been selected in allusion to the fact that Padmanābha is also an epithet of Viṣṇu, who wields the wheel. Bastion Street; 4' below surface.

89. Oval, $1\frac{1}{4}'' \times \frac{7}{8}''$. Wheel with a conch on either side. Below, two horizontal lines, one small and the other large. In exergue, legend:—*Kauśikadēvasya*. **6**; 5' below surface.

90. Oval, $1'' \times \frac{5}{8}''$. Wheel on thick horizontal line, perhaps meant for a pedestal. Legend:—*Bhammanasya(?)*. Pierced with hole for broad tape. Bastion Street; $1\frac{1}{2}''$ below surface.

91. Oval, $1'' \times \frac{5}{8}''$. Conch on side. Legend:—*Chuchakasya*. Chuchaka is a curious name. The *Mahābhārata*² mentions a people of the name of Chūchuka. Found with another copy in **19, k**; upper floor.

92. Oval, $1'' \times \frac{3}{4}''$. Conch on side. Below, legend:—*Nityasīha*. **19, k**; upper floor.

93. Oval, $1\frac{1}{8}'' \times \frac{3}{4}''$. Trident. Below, horizontal line. Legend:—*Āryyarakshita*. The owner of this seal would seem to have been a Śaiva. Found, with another copy, in **29**; 4' 9" below surface.

94. Nearly circular; diam. $\frac{7}{8}''$. Standard or flag. Legend:—*Bhādīlasya*. Found in **23, e**.

95. Oval, $1'' \times \frac{5}{8}''$. Symbol like that on a Basārḥ seal.³ Legend:—*Silasya*. **19, k**; upper floor.

96. Oval, $1\frac{1}{4}'' \times \frac{7}{8}''$, with beaded border-line. Pair of human feet (*pādukas*) on pedestal. Legend illegible. **13, a**; 5' below surface.

97. Similar, $\frac{3}{4}'' \times \frac{3}{8}''$. Padukas. Illegible legend. High Street; 2' higher than floor level in **12**.

98. Oval, $\frac{7}{8}'' \times \frac{1}{2}''$. Fire-altar.⁴ Legend in exergue:—*Ādityasya*. Reverse plain, but hole pierced through the seal. **30, 6"** above floor.

¹ Viṭhu is a dialectic corruption of Viṣṇu; Cf. Vāṭhadīpa, *J. R. A. S.*, 1907, p. 1053. In Bengal Viṣṇu is pronounced as Bisṭhu which is only one step removed from the form in this seal. The forms Viṭhu and Viṭhō are used in Southern and Western India, *J. R. A. S.*, 1908, p. 164.

² Parvan XIII, 207, 42.

³ *A. S. R.*, 1903-04, Pl. XLI, No. 26.

⁴ This emblem occurs on the coins of the Kushanas, Guptas and Indo-Sassanians. Also on a Gupta seal from Sunet, *J. R. A. S.*, 1901, plate facing p. 99, fig. 13, and another seal of the same period from Basārḥ. *A. S. R.* 1903-04, Pl. XL, 9.



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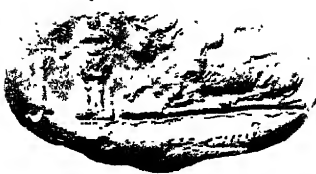
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SEALINGS

99. Square, $\frac{3}{4}'' \times \frac{3}{4}''$. Fire-altar. Legend :—*Anantadattasya*. Spoil earth from 13.
100. Slightly oval, $\frac{3}{4}'' \times \frac{5}{8}''$. Fire-altar (?). Legend much worn. Perhaps *Yakshanāga* (or *tha*). Spoil earth.
101. Oblong, $\frac{5}{8}'' \times \frac{1}{2}''$. Fire-altar. Legend illegible. 7; 2' below surface.
102. Fragment of sealing. Portion of flag. Legend *ttasya*. 24, a.
103. Circular; diam. $\frac{1}{2}''$. No device. Legend in very cursive script of about 6th century : *Aryya*(?). Reverse blank. High Street; 2" below surface.
104. Conical-shaped sealing, $1\frac{1}{2}''$ high. Legend in characters of 8th or 9th century A.D.:—*Śrī-Suvarṇa*. Spoil earth.
105. Oblong, $2'' \times \frac{1}{4}''$. Legend in Nāgarī of the 9th or 10th century A. D.:—*Om Śrī Raṇasi* [m*] *haḥ*. After the legend, figure resembling a ladle. Bastion Street; near the surface.

f. Sealings with place names.

106. Circular; diam. 1". *Nandipada*. Below, legend in northern characters of the Gupta period :—*Chitrāgra(ā)ma*. The name cannot be identified. 19; upper floor.
107. Circular; diam. $\frac{7}{8}''$. Legend in northern characters of the 4th or 5th century A.D.:—*Rudrikōṭa*. The name cannot be identified.
108. Oval, $\frac{7}{8}'' \times \frac{5}{8}''$. Uncertain symbol. Legend in similar characters :—*Jatēyagra(ā)masya*. The name cannot be identified. 13, g; upper floor.
109. Two impressions :—
- (a) Oval, $1'' \times \frac{3}{4}''$. Vase (*ghata*) on pedestal. Below, legend in northern characters of the 4th or 5th century A.D.:—*Vichhāgrāma*. This was probably the name of Bhīṭā in ancient times. Cf. No. 11.
- (b) Oval, $1\frac{1}{8}'' \times \frac{5}{8}''$. Much worn. Above, human figure standing, facing. R. hand holds a staff. L. hand hangs down. Uncertain object to r. In exergue, obliterated legend. This figure would seem to be a representation of some sort of a *grāmadēvatā* of the village. 9; 2' below surface.

g. Sealings of doubtful character.

110. Irregular area. *Svastika* and two other symbols. Legend in Kushan characters :—*Kasakasa*. Reverse plain. 13, n; 6" below upper floor.
111. Oblong, $\frac{5}{8}'' \times \frac{1}{4}''$. No device. Legend in eastern Gupta characters :—*Jatāhaviṣa* (?). 7; 6" below surface.
112. Fragment of sealing. Bull recumbent to l. Below, legend in eastern Gupta characters *pagraha*. 13, e; 8' below surface.
113. Fragment of sealing. Legend in very fine Gupta characters :—*Śakuna*... Spoil earth.
114. Slightly oval, $\frac{3}{4}'' \times \frac{5}{8}''$. No device. Legend in northern characters of the Gupta period :—*Dhavaliga* (?). 7; 6' below surface.

h. Sealings with devices only.

115. Mould. Oblong, $\frac{3}{4}'' \times \frac{1}{4}''$. Pair of *svastikas* in reverse with a leaf pattern on either side. Mauryan, or earlier. Gate ; 2' below concrete floor.

116. Oval, $1\frac{1}{2}'' \times \frac{5}{8}''$. Symbol resembling monogram¹ on copper coins of Azes, which General Cunningham interpreted as meaning Kaspapura or Multan. Near top of symbol, crescent and star. **13** ; $5\frac{1}{2}'$ below surface. Another sealing with the same symbol was found in **19, k** ; upper floor.

117. Square, $\frac{3}{8}'' \times \frac{3}{8}''$. Uncertain symbol.² West of 4 ; 2' below its top.

118. Slightly oval, $\frac{7}{8}'' \times \frac{3}{4}''$. Vase (*ghata*) with foliage on a double horizontal line. This symbol occurs on the nearly contemporary coins of Chandragupta II.³ **19, k** ; upper floor.

119. Oval, $1\frac{1}{8}'' \times \frac{3}{4}''$. Spear standing erect. To its r., crescent ; to l., star. **48, b** ; $5\frac{1}{2}'$ below surface.

120. Lump of clay presenting a rough zig-zag line drawn by the hand and not stamped with a matrix or mould. **19, k** ; upper floor.

¹ *Coins of the Indo-Scythians*, Part I, p. 15.

² *Cf. Rapson, op. cit.*, Pl. VIII, 286.

³ *Smith, op. cit.*, XVIII, 4.

EXCAVATIONS AT BHITA.



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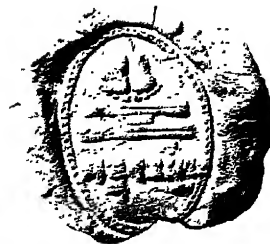
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114



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117



118



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SEALINGS

Index of seals arranged according to the find-spots..

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„ VI.	„ 87, 89.
„ VII.	„ 1, 23, 26, 27, 49, 50, 70, 101, 111, 114.
„ IX.	No. 109.
„ XII.	Nos. 5, 73, 76, 85.
„ XIII.	
Lower floor	„ 19, 20, 110.
Upper floor	„ 14 (to s. w. of XIII), 16, 35, 43, 96, 99, 108, 112, 116.
„ XIX.	„ 2, 22, 25, 31, 32, 39, 46, 48, 51, 52, 53, 54, 55, 57, 58, 64, 74, 75, 78, 81, 82, 83, 91, 92, 95, 106, 118, 120.
„ XXII.	No. 79.
„ XXIII.	Nos. 6, 29, 44, 72, 77, 94.
„ XXIV.	„ 21, 102.
„ XXV.	No. 45.
„ XXVII.	„ 18.
„ XXVIII.	„ 47.
„ XXIX.	Nos. 7, 9, 15, 17, 33, 41, 93.
„ XXX.	„ 3, 24, 34, 98.
„ XXXI.	No. 4.
„ XL.	Nos. 69, 71.
„ XLII.	„ 28, 30, 66.
„ XLV.	„ 40, 41, 60, 61, 63, 65, 84.
„ XLVI.	No. 11.
„ XLVIII.	Nos. 37, 56, 67, 119.

COINS.

No.	Material and size.	Obverse	Reverse.	Find-place.	REMARKS.
I.—PUNCH-MARKED.					
1	Æ	Two solar symbols, caduceus, etc.	Blank . . .	Spoil earth .	<i>Cf. Smith, I. M. Cat., p. 131. Sqq</i>
II.—AYŌDHYA.					
<i>Cock and bull type; Mitra dynasty</i>					
Ayūmitra					
2	Æ	Bull standing l before a post. Legend below, in early Brāhmī characters, <i>Ayūmitasa</i> .	Palm tree in centre; to l., cock facing r. Below, traces of curved line.	Spoil earth .	<i>Ibid</i> , Pl. XIX, 17.
3	Æ	Ditto, but legend much defaced, possibly <i>Ayūmitasa</i> .	Ditto . . .	Purchased at Bhīṭā	...
4	Æ ·4	Defaced . . .	Defaced . . .	Building No. 45 ; about 4' below the surface.	...
III —KUṆINDA.					
<i>Anonymous Chhatrēśvara type.</i>					
5	Æ	Śiva standing facing, holding trident in r. hand; l hand on hip; legend lost.	Stag standing l.; tree in railing r. and six-arched <i>chartya</i> l.	Alley to the east of building No. 25; room 2, on floor level.	<i>Cf. Rapson, Indian Coins, Pl. III, 10; and Smith, op. cit., p. 170.</i>
IV.—KUSHANA					
<i>Kadphises II.</i>					
6	Æ	King diad., wearing tall cap and long coat, standing l, his r. hand over altar; traces of trident with battle-axe in l. field. Club in r. field. Legend effaced.	Śiva, two-armed, standing facing, in front of bull standing r; trident in r. hand. Legend effaced.	Spoil earth .	Smith op.cit., Pl. XI, 7.
7	Æ 1·06	Ditto, but <i>Basi</i> . . legible in r. field. Also monogram.	Ditto . . .	Building No. 13; room 9, on lower floor.	Ditto.
8	Æ	Ditto, but legend effaced.	Ditto . . .	Ditto .	Ditto.

No.	Material and size.	Obverse.	Reverse.	Find-place.	REMARKS.
<i>Kanishka.</i>					
9	Clay ·75	Cast of obverse of a gold coin King standing l. at altar, wearing long coat and holding spear in l. hand. Around margin, legend in Greek script in minute characters which cannot be read.	.....	Building No. 22; room e, under the bottom of north wall.	<i>Cf.</i> Smith, op. cit., Pl. XI, 8.
10	Æ 1·05	King standing l. at altar; legend defaced.	Deity standing, grasping what appears to be a battle-axe.	Building No. 6; 6' below the surface.	...
11	Æ 1·05	Ditto; but legend effaced.	Deity standing l., r. hand advanced l. on sword; legend effaced; otherwise in fair condition.	Building No. 13; room Q lower floor.	<i>Cf.</i> Smith, op. cit., Pl. XI, 11.
12	Æ 1·0	Ditto . . .	Wind-god running to l. with loose hair and hands raised. Traces of legend in r. field.	Ditto .	<i>Ibid.</i> , Pl. XII, 4.
13	Æ 1·0	Ditto . . .	Ditto . . .	Ditto .	Ditto.
14	Æ ·94	King standing l. at altar; legend effaced.	Deity as on No. 11 .	Ditto .	<i>Ibid.</i> , Pl. XI, 11.
15	Æ ·94	Ditto, legend on r. . . <i>Shao Ka</i> ...	Ditto . . .	Ditto .	<i>Ibid.</i> , p. 73, No. 45.
<i>Huvishka.</i>					
16	Æ 1·0	King facing, seated cross-legged on cushions or clouds, holding sceptre in l. hand; r. hand on hip. Legend in Greek script . . . <i>Shao Ooeshki Ko</i> ...	Moon-god standing l.; r. hand stretched out; l. hand on hip, holding sword. In l. field, monogram; to r. Greek legend <i>mao</i> .	Building No. 26; in deep pt.	Ditto. Pl. XII, 5.
17	Æ 1·0	Ditto; but legend effaced.	Male deity standing r. with r. hand holding battle-axe and resting on sword at side and flames rising from shoulders. Legend effaced.	Building No. 6; 6' below the surface.	Ditto.

No.	Material and size.	Obverse.	Reverse.	Find-place.	REMARKS.
18	Æ 1.0	King facing, seated cross-legged on cushions or clouds, holding sceptre in l. hand; r. hand on hip; traces of Greek legend on r. margin.	Moon-god (?) standing l. with crescent behind shoulders; l. hand on hip. Traces of monogram in l. field; legend which occupied r. margin effaced.	Building No. 7, near the well on floor level.	<i>Cf</i> Smith, op. cit., Pl. XIII, 5.
19	Æ 1.0	Ditto; legend effaced.	Male deity standing l. with l. hand on hip. Monogram in l. field; legend effaced.	Building No. 23, room e, 12' 6" below the surface.	Ditto.
20	Æ 1.0	Ditto . . .	Ditto . . .	Building No. 44, room, e, 8' below the surface.	Ditto.
21	Æ 1.0	Ditto . . .	Traces of deity standing l.	Building No. 13, room e, lower floor.	Ditto.
22	Æ .95	King, diad. riding elephant r.; traces of legend on r. margin.	Male deity standing r., holding wreath in r. hand. Monogram in l. field. Legend effaced.	Building No. 48, 2' 6" below the surface.	<i>Ibid</i> , Pl. XIII, 2 and 3.
23	Æ 1.0	Ditto; on l. ...aona....	Male deity standing r. with r. hand advanced.	Building No. 13, room i, lower floor.	Ditto.
24	Æ 1.0	Ditto; on r., ...aona...	Male deity standing r.	Ditto . . .	Ditto.
25	Æ .94	Ditto; but legend effaced.	Male deity standing r. with r. hand advanced and l. on hip.	Ditto . . .	Ditto
26	Æ 1.0	Ditto; on r. Sha...	Ditto . . .	Ditto . . .	Ditto.
27	Æ 1.0	Ditto; legend effaced.	Effaced . . .	Ditto . . .	Ditto.
28	Æ .95	King leaning back on throne with r. knee tucked up; legend effaced.	Male deity standing l. holding wreath (?) in r. hand and sword in l. hand. To l., monogram. Legend effaced.	Spoil earth . . .	<i>Ibid</i> . Pl. XIII, 6.

No.	Material and size.	Obverse.	Reverse.	Find-place.	REMARKS.
29	Æ 1·0	King leaning back on throne with r. knee tucked up; legend effaced.	Moon-god standing l. holding wreath or fillet in r. hand and sword in l. On r., Greek legend.	Building No. 13, room <i>f</i> ; lower floor.	Cf. Smith Pl. XIII, 6.
30	Æ ·95	Ditto . . .	Defaced . . .	Ditto . . .	Ditto.
31	Æ ·95	Defaced; but traces of king seated as in No. 28.	Traces of deity . .	Spoil earth from the long trench north of the main approach.	...
32	Æ ·95	Defaced . . .	Defaced . . .	Lane between houses Nos. 29, and 44, 6" below the level of the floor in room <i>m</i> of the former building.	...
33	Æ ·95	Ditto . . .	Ditto . . .	Building No. 13, room <i>i</i> ; lower floor.	...
34	Clay ·7	Mould of the obverse of a Kushana coin. Goddess standing r.; in r. field, monogram. Legend obliterated.	..... <i>Vāsudēva.</i>	Trench No 42, near the surface.	...
35	Clay ·8	.....	Mould of the reverse of a gold coin of Vāsudēva. Two-armed Śiva standing facing, holding noose (<i>pāśa</i>) in r. hand and trident in l. Behind him, bull standing l.; and above r. shoulder of the deity, monogram. In r. field, Greek legend <i>Oēsho</i> .	Building No. 26, room <i>b</i> , on floor.	Op. cit., Pl. XIII, 8.
V.—KŌSAM (Ancient Kauśāmbī).					
<i>Bahasati-(Bṛihaspati) mitra.</i>					
36	Æ ·8	Tree in railing; traces of symbol to l.; below, legend in early Brāhmī characters which seems to be <i>svatimīta</i> .	Defaced; probably a <i>chaitya</i> to r.	Building No. 43, 2' 6" below the surface.	Cf. Cunningham, <i>Coins of Ancient India</i> , Pl. V, 11.

No.	Material and size.	Obverse.	Reverse.	Find-place.	REMARKS.
37	Æ ·8	Tree in railing; below, traces of Brāhmī legend <i>mitasa</i> .	Humped bull moving to r. Rest effaced.	Building No. 13, in the foundation of room <i>f</i> .	<i>Cf.</i> Cunningham, <i>Coins of Ancient India</i> , Pl. V, 11.
38	Æ ·8	Ditto; but legend effaced.	Ditto . . .	Trench No. 48, room <i>w</i> ; 13' below the surface.	Ditto.
39	Æ ·8	Ditto; rest effaced	Ditto . . .	Trench No. 48, room <i>i</i> ; 10' below the surface.	Ditto.
40	Æ ·8	Ditto . . .	Ditto . . .	Trench No. 42; 6' below the surface.	Ditto.
41	Æ ·8	Ditto . . .	Ditto; but traces of <i>chaitya</i> to r.	Building No. 43, room <i>a</i> ; 4' 6" below surface.	Ditto
42	Æ ·8	Tree in railing; to r., snake; to l., traces of Ujjain symbol.	Humped bull moving r.	Area between Buildings, Nos. 6 and 7; 7' below the surface.	Ditto.
<i>Prashthasriya</i> (?)					
43	Æ ·75	Tree in railing; three arched <i>chaitya</i> to l.; below, legend in Brāhmī characters of the Kushana period <i>Prashthasriya</i> (?)	Humped bull standing r.	Building No 29, room <i>b</i> ; on floor.	This coin supplies the name of a new ruler of Kauśāmbī, but his full name is doubtful.
44-71	Æ ·75	Ditto . . .	Ditto . . .	Trench No. 48; 10' 6" below the surface	Ditto.
72	Æ ·75	Damaged and illegible.	Bull standing r.; above, wheel.	Ditto . . .	Probably of the same type as Nos. 43 to 71.
<i>Pavata</i> (?)					
73	Æ ·7	Tree in railing; below, in Brāhmī characters <i>Pavata</i> (?)	Humped bull standing r.	Building No. 23, room <i>e</i> ; 12' 6" below the surface.	<i>Cf.</i> Smith, <i>op. cit.</i> , Pl. XX, 4.

No.	Material and size.	Obverse.	Reverse.	Find-place.	REMARKS.
<i>Anonymous.</i>					
74	Æ ·75	Traces of <i>chartya</i> ; below, in Brāhmī characters, <i>vya</i> ; crossed border.	Humped bull standing r.	Spoil earth from building No. 40.	...
75	Æ ·75	Ditto . . .	Ditto . . .	Building No. 31, room <i>d</i> ; 8' 8" below surface.	...
76	Æ ·75	Similar; but Brāhmī <i>vi</i> .	Illegible . . .	Building No. 13, room 9; lower floor.	...
77	Æ ·75	Tree in railing; below, in Brāhmī characters, <i>yama</i> ; crossed border.	Bull standing r.; above, wheel; below, Ujjain symbol.	Building No. 46, room <i>c</i> ; 2' above the floor	...
78	Æ ·8	Tree in railing; to l., three-arched <i>chaitga</i> ; below, three Brāhmī characters which cannot be read.	Bull standing r.; above, wheel.	Spoil earth from trench No. 42.	...
79	Æ ·75	Tree in railing; rest effaced.	Effaced . . .	Main approach; in deep pit, below bottom of north wall of building No. 12.	...
80	Æ ·7	Ditto . . .	Humped bull moving l.	Trench No. 40, room west of <i>c</i> ; about 4' above the early floor.	...
81	Æ ·8	Tree in railing; to l., lion rampant. Legend effaced.	Humped bull moving r.; rest effaced.	Building No. 23, room <i>e</i> ; 12' 6" below the surface.	Cf. Coin of Aśvaghosha, Cunningham, op. cit., Pl. V, 14
82	Æ ·75	Traces of tree in railing.	Worn . . .	Purchased at Bhītā.	..
83	Æ ·75	Tree in railing; to l., uncertain symbol.	Illegible . . .	Ditto . . .	...
84	Æ ·75	Ditto . . .	Humped bull standing r	Building no. 23; 1' below the foundation.	...
85	Æ ·7	Tree in railing .	Worn . . .	Building No. 23, room <i>e</i> ; near floor level.	..

No.	Material and size.	Obverse.	Reverse.	Find-place.	REMARKS.
86	Æ ·5	Tree in railing; below, three-arched <i>chaitya</i> and Brāhmī letter <i>sa</i> .	Bull standing r.; below, traces of crossed border.	Building No. 23, room <i>e</i> ; on floor level.	...
87	Æ ·5	Tree in railing; to l., traces of Ujjain symbol.	Elephant (?) standing.	Not known .	...
88	Æ ·5	Ditto; but no Ujjain symbol.	Ditto . . .	Trench No. 48, room <i>n</i> , 10' 6" below the surface.	...
89	Æ ·5	Effaced . . .	Humped bull standing r.	Between buildings Nos. 26 and 27; 9' 4" below the surface.	...
90	Æ ·6	Tree in railing; to r., snake; to l., traces of <i>chaitya</i> .	Bull standing r. .	Building No. 29, room <i>b</i> ; on floor.	...
91	Æ ·6	Tree in railing . . .	Worn . . .	Building No. 23, room <i>e</i> ; 12' 6" below the surface.	...
92	Æ ·55	Ditto . . .	Ditto . . .	Ditto . . .	Square.
93	Æ ·55	Ditto . . .	Bull standing r. .	Trench No. 48, room <i>n</i> ; 12' below the surface.	Ditto.
94-95	Æ ·5 & ·55	Ditto . . .	Worn . . .	Building No. 23, room <i>e</i> ; on early floor.	...
96	Æ ·6	Tree in railing between snake (?) and three-arched <i>chaitya</i> . Traces of legend around margin.	Humped bull standing r.	Spoil earth .	...
97	Æ ·5	Tree in railing; round margin, traces of legend.	Ditto . . .	Ditto . . .	...
98	Æ ·55	Tree in railing . . .	Worn . . .	Building No. 13, room <i>i</i> ; lower floor	...

No	Material and size.	Obverse.	Reverse.	Find-place.	REMARKS.
99	Æ ·4	Tree in railing .	Bull or elephant standing	Spoil earth .	...
100	Æ 1·05	In centre, conventional tree and railing; below, six-arched <i>chaitya</i> ; to l., flying <i>gandharva</i> , wheel and illegible symbol; to r., Ujjain symbol and <i>svastikā</i> .	Humped bull walking l., towards standard with peculiar head; uncertain symbol above the bull; cast in high relief.	Building No. 7, room <i>n</i> ; on floor level.	Smith, op. cit., XX, 5. Pl.
101	Æ ·7	Two symbols or Brāhmī letters; below, crossed border.	Humped bull standing r.	Main approach; between buildings Nos. 12 and 22; at the level of concrete floor	..
102	Æ ·65	Two symbols .	Elephant standing r. .	Building No. 13, in one of the eastern rooms	Doubtful.
103	Æ ·65	Crossed border at the bottom.	Worn . . .	Building No. 22, room <i>f</i> ; lower floor.	<i>Of</i> Cunningham, C. A. I., Pl. V, 18.
104	Æ ·7	Three symbols with a crossed border below.	Worn . . .	Trench No 42; 6' below the surface.	...
105	Æ 65	Same symbols as on 104 but in different order; below, crossed border.	Effaced . . .	Building No. 9, room <i>a</i> ; on floor level	..
VI —ĀNDHRA.					
106	Lead ·95	Worn . . .	Worn . . .	Building No. 45; about 11' below the surface.	...
107	Lead ·75	Uncertain symbol	Illegible . . .	Surface . . .	...
VII.—COINS OF ABOUT THE 2ND CENTURY A.D.					
<i>Anonymous, circular cast coins.</i>					
108	Æ ·45	Three-arched <i>chaitya</i> with crescent above.	Elephant walking l. .	Purchased at Bhīṭā.	Smith, op. cit., XXII, 3. Pl.

No.	Material and size.	Obverse	Reverse.	Find-place.	REMARKS.
109	Æ 45	Three-arched <i>chaitya</i> with crescent above.	Elephant walking l. .	Purchased at Bhītā.	Smith, op. cit., Pl. XXIII, 3.
<i>Anonymous ; rectangular cast coins.</i>					
110	Æ 6	Tree in railing ; to l., <i>chaitya</i> with crescent above and square cross.	Elephant standing l.; below, triangular-headed symbol.	Building No. 12, room <i>b</i> ; 3' 6" below floor level.	Smith, op. cit., Pl. XXII, 16
111	Æ 6	Ditto . . .	Ditto . . .	Building No 19, room <i>x</i> ; 1' 6" below upper floor.	Ditto
112	Æ 6	Ditto . . .	Ditto . . .	Building No. 23, room <i>e</i> ; 12' 6" below the surface.	Ditto
113	Æ 6	Ditto . . .	Ditto . . .	Building No. 7 ; 4' above the level of the floor in No 13	Ditto
114	Æ 7	Worn . . .	Worn . . .	Spoil earth . .	Doubtful
115	Æ 6	Tree in railing ; to r., <i>chaitya</i> with crescent and below it, triangular r-headed symbol with another symbol to l.	Elephant to l. ; above it, square cross ; to l., post and <i>svastikā</i> .	Purchased at Bhītā	This coin has all the symbols that figure on Nos 110 to 113 but in a different order.
116	Æ 4	Worn . . .	Three-arched <i>chaitya</i> .	Building No 43 ; 2' 6" below the surface.	<i>Cf</i> Smith, op. cit., Pl. XXII, 17
VIII.—JANAPADA (?)					
117	Æ 75	Brahmī legend <i>Jana</i> ; below, crossed border.	Chipped . . .	Building No 13 ; room <i>i</i> ; lower floor	Identification doubtful, but compare Rapson, <i>Indian Coins</i> , Pl. III, 19.

No.	Material and size.	Obverse.	Reverse.	Find-place.	REMARKS.
118	Æ ·8	Rude standing figure; r. arm down; l. arm raised.	Rude standing figure.	Building No. 13; in one of the eastern rooms	<i>Cf.</i> Smith, op. cit., Pl., XIV, 14.
119	Æ ·65	IX.—KALINGA. X.—AFGHAN. <i>Sikandar Shāh Lōdī.</i>		Purchased at Bhīṭā	<i>Cf.</i> Wright <i>I M. Cat.</i> , Vol. II, No. 582
120	Æ ·5	<i>Ibrāhīm Shāh II, Lōdī.</i>		Building No 31, room b; 1' below the surface.	<i>Cf.</i> Wright, op cit., No. 612.

TERRACOTTAS.

The terracottas from Bhīṭā fall naturally into five chronological divisions, *viz.* (1) Primitive, (2) Maurya, (3) Śuṅga and Āndhra,¹ (4) Kushāṇa, (5) Gupta and later.

In the first group (Nos. 1-8) may be noticed in particular the elephant and rider toy (No. 1) belonging approximately to the 8th century B.C., and the horse's head (No. 3) of somewhat later date, which is covered with a black glazed slip picked out with cream coloured spots.

In the Mauryan group (Nos. 9-16) two objects (Nos. 9-10) are of special value, as being the earliest representations of the human figure in which a real effort towards artistic expression is manifested. Small and roughly fashioned as they are, they foreshadow the free and naturalistic treatment which characterises the later and more developed sculptures at Sāñchī and contemporary monuments.

To these sculptures the terracottas of the third class are closely akin, forming a clear and distinctive group, of which the character is unmistakable. Most striking among them is the medallion (No. 17) to which reference has already been

¹ The terracottas of the third class are, for the most part, analogous in style to the bas-reliefs on the gateways of the Main Stupa at Sāñchī, which are now known to have been executed in the 1st century B. C., under the rule of the Āndhras.

made on p. 26 above, the plaque No. 20, and the figurines 18, 19 and 22 and the beautiful little camel's head No. 31. All the objects of this period are distinguished by a refinement of detail, such as is never afterwards found in Indian art.

Contrasted with them, the terracottas of the Kushana period are singularly crude and uncouth. Of this group 67 examples were found in the course of my excavations, of which 13 (Nos. 33—45) are included in the list below. They fall into two main classes, namely (1) toy figurines of rough and ready make (*Cf.* figs. 34, 35 and 36), and (2) larger figures, in which there is an effort towards more realistic expression (*Cf.* figs. 40, 42, 43, 44).

These crude types of terracottas continued to be made long after the Kushana period (*Cf.* Nos. 58—61), but side by side with them were produced, in Gupta times, figurines of a far more finished style, which reflect in a minor measure the artistic spirit of the paintings and sculptures of that epoch. Between six and seven hundred of these figurines were recovered, some of men, some of women, and some of children. All are mechanical reproductions from moulds, a few of which were found, but duplicates in the collection are rare. Some of the figurines are without slip or paint; others are painted in a monochrome—red or yellow, for instance; and others are coated with a slip and adorned with a variety of colours—red and pink and yellow and white. But apart from their artistic interest, these figurines are valuable for the information they furnish as to the fashions in vogue during the Gupta age. The chief article of dress with both men and women seems to have been a long loose robe resembling the Buddhist *sanghāṭī* and worn in much the same fashion. In the female figures, this robe extends to the ankles, and is frequently tied at the waist with a girdle. Whether a second garment was worn beneath, is not apparent. Men seem to have used the upper robe more in the manner of a scarf (*dupattā*). One male figure wears a scarf only across the loins, the rest of the body being bare. The use of shoes appears to have been unknown. On the other hand, the various modes of dressing the hair were as numerous then as they are among women to-day, and perhaps even more startling. The men, certainly, must have been foppish to a degree, with their long curls falling loose on one side only, or elaborated like a full Georgian wig, or coiffured with jewels in the Antoinette style, or disposed more severely in the regal manner of Persia¹

I.—Primitive.

1. Child's rattle, 4" high, in the form of an elephant with rider. Buff clay, badly baked. No colour or slip. 42; 21' below surface.

2. Tablet, 3½" long, roughened with incisions, for rubbing or cleaning feet. 42; 17' below surface.

3. Head of animal (horse?), 3" high. The mane is indicated by notches, the eyes by raised dots. Black glazed slip with cream-colour spots painted on. Early concrete floor between houses 12 and 22; 23' below surface.

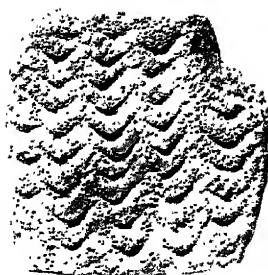
4. Fragment of elephant's head, 4" high. Lower portion of trunk and tusks broken off. May have been part of jar. Buff-coloured clay without slip or paint. *Ibid.*

¹ *Cf. Mṛicchhakatikā*, Act 9. Trans. by Dr. A. W. Ryder, p. 132.

EXCAVATIONS AT BHITA.



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5. Lid of casket with handle. Diam. $2\frac{1}{2}$ ". Vestiges of red colour. *Ibid.*, one foot higher.

6. Circular weight, $1\frac{1}{2}$ " in diam. Scallops around rim. Red slip. *Ibid.*, together with two other specimens of same kind.

7. Lower part of a human figure seated in miniature chamber or shrine(?). Soles of feet touching. Two grooves below navel, which may represent a girdle. Ht. $2\frac{1}{2}$ ". Buff clay, badly baked; chocolate slip. Deep pit south of room *a* in **40**; 22' below surface.

8. Wheel, $4\frac{1}{2}$ " in diam. Slightly raised rim and hole in centre. Red colouring; no other decoration. **7**; $8\frac{1}{2}$ ' lower than lowest floor in **13**.

II.—Mauryan.

9. Mould, $2\frac{1}{2}$ " long, representing a woman under a palm tree. Uncertain object to l. **13**, *n*; below lower floor.

10. Figure of woman in relief, 3" high, broken from thighs downwards. Head-dress similar to that in Bharhut sculptures. R. hand rests on hip; l. raised from elbow. Necklace and girdle. **42**; 10' below surface.

11. Middle portion of figurine of woman, $2\frac{3}{4}$ " high. Buff clay, without slip. Cf. No. 34 below. **7**, *e*; $1\frac{1}{2}$ ' below bottom of wall.

12. Primitive vessel, 4" high, in imitation of human figure. Arms and legs indicated in relief with necklace round neck. Hole on shoulder, behind neck, and another at navel. Head broken. Clay, reddish buff with red paint. **7**, *j*; 6" below bottom of wall.

13. Head of a pig, 4" long; clay, light buff, with slip and red paint sprinkled with mica. **42**; 10' below surface.

14-15. Two rams used, like the human figures above, for tricycle toys. They measure $4\frac{1}{4}$ " \times $4\frac{3}{4}$ ", respectively. The legs are scarcely indicated and the holes for wheel axles are similar to those in human figurines. Many other such rams were found, of approximately the same size and style, but varying in the decoration of the head. Buff clay with reddish slip. **42**, 8' below surface, and **23**, *j*; 16' below surface, respectively.

16. Miniature elephant, $2\frac{1}{2}$ " long. Mutilated, but apparently a handle of vase. Similar clay with thin wash. High Street; 2' below foot of front wall of **12**.

III.—Śunga and Āndhra.

17. Plaque, 3" in diam. Same scene on both faces. At top, two persons looking over railing with foliage to r. Below, to r., four-horse chariot with charioteer and one other person; groom at horses' heads. To l., shrine with *chaitya* doorway and rail around. In front and below shrine, tank with lotuses and figure drawing water. At bottom, two deer, and one peacock (?) to r. **19**, *f*; below lower floor.

18. Standing figure of woman in relief, $4\frac{1}{2}$ " high. Elaborate head-dress, heavy necklace, girdle, bangles, anklets and large ear-rings. There seems little doubt that this figure is draped to the anklets. The upper edge of the garment is heavily

indicated across the body leaving the left breast bare R. hand holds drapery. On l. side, flowers. Buff clay with red slip. **42, c**; 4' below surface.

19. Figure of man, 4" high, squatting with knees drawn up. The hands rest on knees. On l. hand is a parrot; the r. hand appears to hold some foliage. The head-dress consists of a fillet of flowers with two plumes above, the hair falling in short straight strands on the forehead, but longer at the sides of the head, where it appears to pass through cylindrical ornaments. At first sight, the latter might appear to be ear-rings, but a close inspection shows that the ears are not indicated, being concealed beneath the locks at the side of the head. Round the neck is a necklace of three strands with terminals and a triangular pendant in the middle. The figure wears a sleeved coat, like the modern *chogāh*, which is open but provided with loop and knot to fasten it across the chest. The under-garment is not indicated. Between the legs is a flower or leaves. Anklet on r. leg; that on the l. is concealed by parrot's tail. The figure seems to have been made by hand and is solid. Clay, red with darker red slip. A hole in the top suggests that the figure was meant to be suspended. **13, f**; immediately below bottom of wall.

20. Plaque with four horses facing. Broken at lower edge Ht. $2\frac{3}{4}$ ". Plumes on heads of horses and ornamental harness. Above, a border of flowers and uncertain devices in the typical style of 1st century B. C. Reddish buff clay, without slip or paint. **13, f**; immediately below bottom of wall.

21. Male figure, $3\frac{3}{4}$ " high, with long train, and hands clasped in front. On train of garment are various floral devices in imitation of design on the cloth. The figure was originally mounted on wheels, as is evidenced by the transverse hole through the front portion of base. A third wheel was affixed to the back. **23, e**; 1' below early floor.

22-23. Two male figures, height 4", belonging to similar tricycle toys as last; back portion in both split off. Wear necklaces and ear-rings. Small hole pierced between hands. Buff clay with red slip. **29**; below early floor.

24. Similar figure, squatting in oriental fashion on ornamental base. Wears necklace and girdle; head missing. Small hole above hands Ht. $3\frac{1}{4}$ ". Buff clay with reddish slip. **13, f**; below early floor.

25-28. Four wheels for toy tricycles. The large wheels measure $3\frac{7}{8}$ " in diameter; the others $3\frac{1}{4}$ " and $2\frac{1}{2}$ ", respectively. The two largest and the smallest are stamped on one side only and were manifestly meant for side wheels; the other is stamped on both sides and served for the back wheel of a tricycle. The largest specimens are elaborately decorated with spokes and floral motives—all stamped from moulds. Many other wheels of a similar kind were found. They are all made of a reddish buff clay with slip of the same colour, with the exception of the hind wheel which is of a greyish clay, badly baked. The two largest wheels were found in **42, c**; 4' below surface; the other two on the floor of **7**, in rooms *e*, and *n*, respectively.

29. Mutilated elephant, 6" long. Pad on back stamped, like the head, with floral designs. Light buff clay with reddish slip. **42, c**; 4' below surface.

30. Miniature camel, 3" long; roughly made by hand. Buff clay with slip. **13**; below bottom of wall.

31. Head of camel, 3" long, with the same leaf decoration on forehead as on



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42

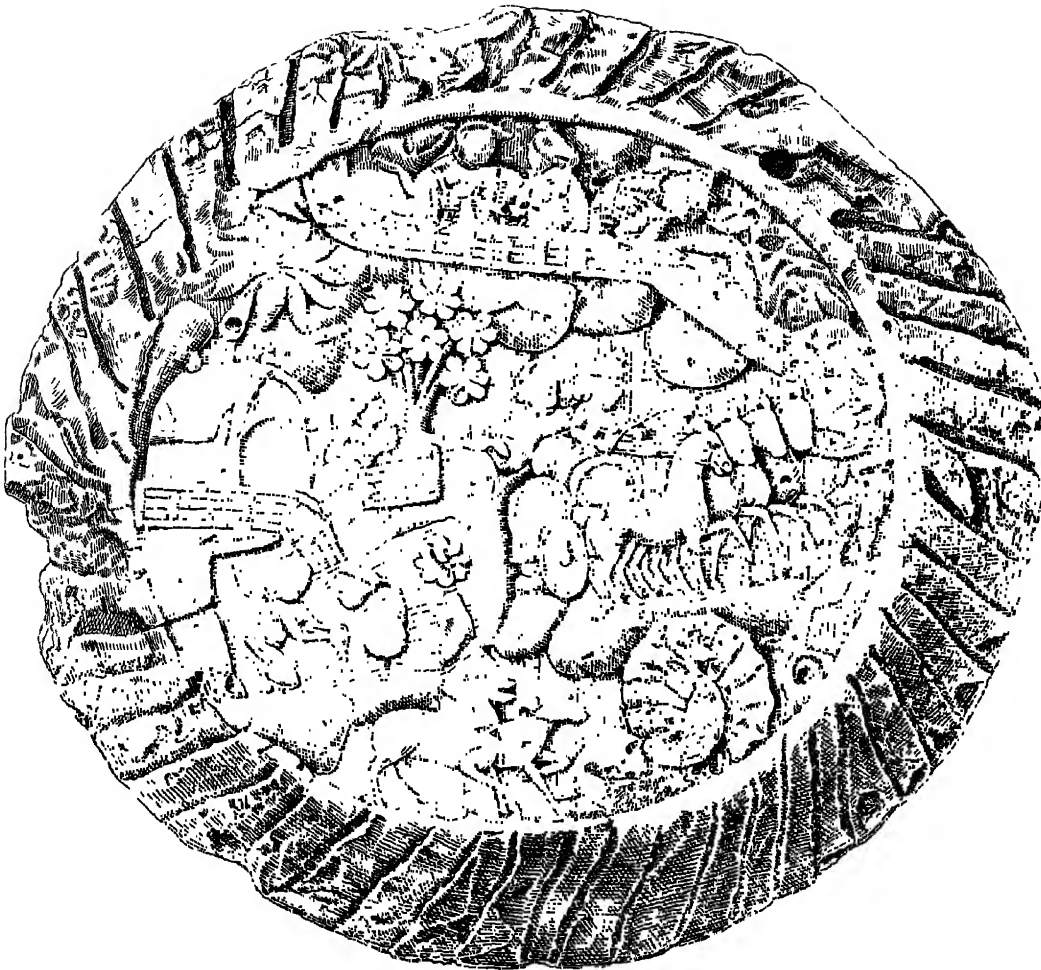


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44

TERRACOTTAS



TERRACOTTA PLAQUE NO. 17. DOUBLE ACTUAL SIZE.

rams described above. The modelling is peculiarly good. Clay, light buff with slip and mica. High Street ; 4' above concrete floor

32. Fragment, $2\frac{1}{2}$ " long, stamped with decoration of bells, flowers, etc., in relief. Perhaps a portion of a *makuṭa* or a symbol of the so-called *Kūrmachakra* type. Clay, pink with red slip ; 12, c ; 2' below surface.

IV.—Kushana.

33. Crude head, $3\frac{1}{2}$ " high. Light buff clay without slip or colour. 42 ; near surface. This is probably of Kushana date, but may be later.

34. Figure of woman, 7" high. L. leg broken. Buff-coloured clay with slip. 19, a ; lower floor.

35. Figure of woman, $5\frac{1}{2}$ " high. L. hand broken. Buff-coloured clay. 50 ; central chamber ; $11\frac{1}{2}$ ' below surface.

36. Crude human figure, $3\frac{3}{4}$ " high, probably a toy. Buff clay, with thin slip and red paint. 29, lower floor.

37. Quadruped, $3\frac{1}{2}$ " long. Pale clay, no slip or paint. Bastion Street ; 12' below surface

38. Crude figure of elephant (?) 6" long. Three legs and trunk broken. Light clay, slip and red paint. 23, e ; floor.

39. Mutilated bust of man, 5" high. Fold of garment across chest leaving r. shoulder bare. Coarse clay with red slip. 13 ; lower floor.

40. Circular plaque, diam. $4\frac{1}{2}$ ". On one side, female figure in high relief with arms and legs outstretched. In place of head is a lotus flower with petals falling over shoulders. Girdle of circlets around waist and bangles on hands and feet. Possibly represents Prithivī, the Earthgoddess. A similar figure was found at Kōsām and is now in the Indian Museum (*Cat.* II, p. 286, No. Km. 36). Coarse buff clay with slip and red paint. 31, b ; under-ground chamber. Probably of Kushana date, but may be Gupta.

41. Middle portion of female figure, 5" high. Drapery over l. arm. Amulet like those seen in Mathurā and Gandhārā work above navel ; girdle round loins. Pale red clay, badly baked. High Street ; 3' above concrete floor between 4 and 5.

42. Head, 5" high. Mark on forehead, perhaps third eye. Fillet around hair. Beard represented by row of incisions under chin. Perhaps Śiva. Clay, buff, without slip or paint. East of 4 ; 3' above concrete floor. Probably Kushana but may be later.

43. Head, $6\frac{1}{2}$ " high. Plume or other ornament encircled with fillet on top of head. Around it, a circle of hair decorated with beads, etc. Reddish clay with dark red paint. 7 ; $2\frac{1}{2}$ ' above level of lower floor in 13.

44. Head, $3\frac{1}{2}$ " high. Mark on forehead. Moustache and beard. Ear-lobes decked with leaves. Grey clay, burnt to red on surface. 7 ; 2' above level of lower floor in 13.

45. Part of coiffure (?), $5\frac{3}{4}$ " across ; of grey black clay ; hollow within. 29, c ; 12' below surface.

V.—Gupta and other.

46. Head of figure, 2" high. Star on forehead; fillet on top. Buff clay with thin slip. **20**; 6' below surface. Probably of Gupta date, but may be Kushāṇa.

47. Dish, probably representing shrine. Diam 13". Inside, are seated seven goddesses in a ring with slightly concave shallow pedestal or tablet in the middle. On this pedestal was found a stone catapult or sling ball. The enclosure is furnished with a portal, 4½" high. The figures are very roughly shaped and are much mutilated. Reddish grey coarse clay without slip or paint. **13**, *b*; upper floor. A fragment of a similar dish was found in **7**, *m*, on the same level.

48. Dish with square corners broken on one side. Length 12½". No figures are inside, but there are four symbols on the bottom raised in high relief. Clay, coarse grey-black baked to red at edge, with a rough slip. **44**; 3½' below surface.

49. Image of Śiva and Pārvatī seated side by side on a throne, facing front. The god's feet are crossed and knees raised above throne. The head was made in a separate piece and was found lying apart. He wears a long necklace, a *dhōṭī* and a mantle, the folds of which are indicated by incisions. His r. hand is partly concealed under the mantle on chest. The legs of the goddess hang down. She wears a necklace of big beads, a longer necklace like Śiva's, anklets and *sāri*. Her hair falls down back and is fastened just above waist. In front of throne, bull and lion couchant. Total height 1'. Black and red clay with slip and red paint. Found at the same spot as No. 47.

50. Headless figure of woman seated on cylindrical stool in western fashion. *Sāri* broken away from knees downwards. Wears a necklace and rosette over l. shoulder. Hands broken. Total height. 7¾". Red clay without slip or paint. *Ibid*.

51. Lower portion of statuette of man standing. Same style as above. Height 8". Grey black clay baked to red at edges, with red paint. *Ibid*.

52. Bust of *Rākshasa*, 7" high. Two tusches; short beard; hanging ear-ornaments; necklace passing over shoulders; hair falling down back. Under l. arm, uncertain object, perhaps thunderbolt. *Ibid*.

53. Headless statuette of seated woman, 3" high. Cup in l. hand. Uncertain object in r. hand, broken. Head and legs, from knees downwards, missing. Necklace and bangles. Red-grey clay with slip and dark red paint. **13**; upper floor.

54. Head of man, 3½" high. Moustaches indicated by incisions. Necklace and ear-pendants; fillet on head. The figure was hollow, with aperture in top of head. Clay, grey and red with thin red slip. **7**; 5' below surface.

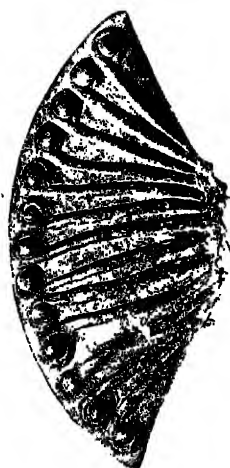
55. Legs of two birds (*garuḍas*?) standing side by side, 6" high. Grey and red clay with dark red paint. **30**; 6' below surface.

56. Head with tenon, 5" high. Protracted ear-lobes. Clay, grey and red, with greyish red paint. **40**; 4' below surface.

57. Head, 3½" high. Thick lips and nostrils. Large ear-rings. Hair falling down back of head. Clay, grey and red. High Street, between **12** and **22**; 8' below surface.

58. Head, 4" high. Fillet over head; hair falling down back. Grey-red clay with red slip and darker red paint, finely polished. **27**; 8½' below surface.

EXCAVATIONS AT BHITA.



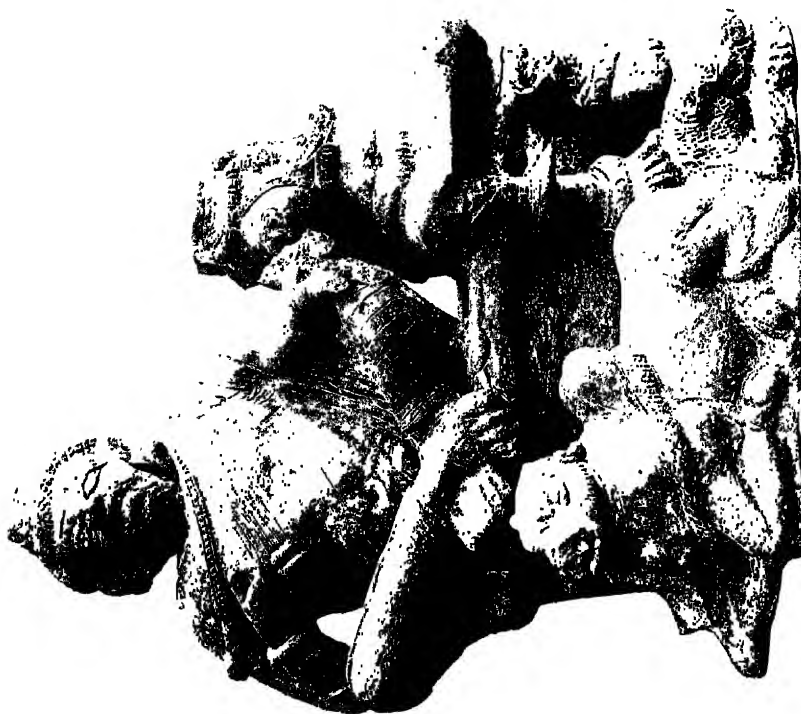
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LITHOTYPE BY WALTER GRIGGS, LONDON, W.C.



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59. Head, 5" high. Fillet across forehead. Clay, grey and red, with dark polished paint. **7**; 7' below surface.

60. Head with tenon, 6" high. Ornamental head dress. Clay, grey and red. **13**; upper floor.

61. Head of man, 6" high. Moustache and beard. Elaborate ear-rings and head-dress with garland and floral device. Clay, grey and red, with red polished paint. **30**; 5' below surface.

62. Man's head, 5" high, with high head-dress and thick garland over forehead and necklace. Incised lines on cheeks may indicate tatoo marks. Buff clay with slip and fine red paint. High Street; 3' above floor.

63. Head, 3½" high. Well finished in clay mixed with mica. Upper part broken. **13, f**.

64. Head, 3½" high. Forehead ornament and fillet, with string of beads passing down l. side. Clay, grey and red. **13**; upper floor.

65. Head, 4½" high. Elaborate head-dress. Clay, grey and buff with red brown paint. High Street; 1' below surface.

66. Head, 5" high. Crown-like head-dress. Clay, grey, and buff with brick-red paint, unpolished. High Street; 2' below surface.

67. Head, 6" high. Hair falling down back, dressed with ornamental fillet above and frontal ornament. Large ear-ring in l. ear. Clay, grey and buff, with slip and traces of red paint. Bastion Street; 5' below surface.

68. Head, 4" high. Short moustache. Hair dressed in twisted fillet. Clay, grey and red, with buff slip. **6**; 4' below surface.

69. Fragmentary plaque, 4¼" high, with standing figures of man and woman facing. The r. arm of the woman is around the neck of the man; her l. hand hangs down by her side. The r. hand of man on his hip; his l. arm around the woman's neck. Drapery uncertain. Hair of both falling on shoulders with coil on top of head. Dark grey clay with admixture of mica badly baked **9, b**; 2' below surface.

70. Standing figure, 3½" high. Wear short *dhōṭi* round middle; necklace, bangles and ear-rings. Uncertain object in r. hand. Clay, buff-red, with traces of red paint. **30**; 5' below surface. Another copy from same mould was also found.

71. Standing figure. 3¼" high. Head and neck missing. R. hand holds uncertain object. Garment reaching to just above knees, with mantle at back. Grey clay, badly baked. **13**; 3½" below surface.

72. Standing figure, 5" high. Feet broken. R. arm raised from elbow, holding uncertain object. Dress similar to No. 71, but traces of *dhōṭi* between legs. Red clay sprinkled with mica. No slip or paint. **30, b**; 3rd floor.

73. Similar, height 5". R. hand at side; l. on hip. Dress same as in last, but no trace of *dhōṭi* between legs. Clay, same as in last. **30**; 4' below surface.

74. Similar, height 5½". Head missing. Dress similar to No. 71. Buff-coloured clay sprinkled with mica and thin slip. **48**; 3' 3" below surface.

75. Head and bust, height 4". Greyish red clay. Buff slip with yellow ochre paint picked out with white. Alley north of **13**; 2' below surface.

76. Similar, height $2\frac{7}{8}$ ". Wear ear-rings. Red clay; no paint traceable. **13**; 6' below surface.

77. Similar, but no ear-rings visible. Height $3\frac{3}{4}$ ". Greyish yellow clay sprinkled with mica. No slip or paint. Much worn. From spoil earth.

78. Similar, with ear-rings and necklace. Height $3\frac{1}{2}$ ". Red clay with thin red-buff slip. **30**; $3\frac{1}{2}$ ' below surface.

79. Similar, height $2\frac{1}{4}$ ". Wears ear-rings and Persian cap. Grey clay, badly baked. **30**; 3' below surface.

80. Similar, height $2\frac{3}{8}$ ". Clay same. **30**; 4' below surface.

81. Head, height $2\frac{5}{8}$ ". Buff red clay, with thin buff slip and trace of pink and yellow paint. **29, e**; 5' 6" below surface.

82. Similar, with heavy ear-rings and fillet across forehead. Coil on top of head broken, height $2\frac{3}{4}$ ". Greyish red clay with thin red slip. **30**; 3rd floor.

83. Similar, with heavy ear-rings and hair dressed as heavy wig with coil on top. Height 3". **30**; 6' above topmost floor.

84. Similar, height 2". Red-buff clay with thin slip. **30**; 6' above topmost floor.

85. Standing type of cupid figure; height $3\frac{1}{2}$ ". Grey clay, badly burnt. **40**; 8' below surface.

86. Similar, height $3\frac{1}{2}$ ". Reddish clay with thin slip. Bastion Road; 5' below surface.

87. Similar, with feet broken. Red clay mixed with mica. **9**; 2' below surface.

88. Standing female figure; height $5\frac{1}{4}$ ", without head. Garment reaching to ankles and mantle behind. R. hand by side; l. on hip. Grey clay with slip and pink paint. **30**; surface

89. Similar, headless. Height $7\frac{1}{2}$ ". Buff-red clay with thin slip. **29**; 5' below surface.

90. Similar, complete. Height $4\frac{3}{8}$ ". Holds uncertain object in l. hand. High head-dress and ear-rings. From spoil earth.

91. Standing miniature figure with hands in supplicating attitude. Height $2\frac{3}{4}$ ". Brown clay, very rough. **51**; 12' below surface.

92. Bust, height $3\frac{3}{4}$ ". Ring in l. ear. Reddish clay with white slip and yellow paint. **13**; $2\frac{1}{2}$ ' below surface.

93. Similar, but different treatment of head-dress. Ring in l. ear. R. ear-lobe protracted. Height $3\frac{1}{4}$ ". Red clay with traces of white slip and pink paint. **30**, Level of top floor.

94. Similar. Wears long ear-rings or side ornaments and necklace with pendants between breasts. Hair falls down back. Height $2\frac{1}{4}$ ". Reddish clay, with polished red paint. **18**; 5' below surface.

95. Similar, both ear-lobes protracted. Height $2\frac{1}{2}$ ". Brownish clay with traces of pink paint. From spoil earth.

96. Similar, Height $2\frac{1}{4}$ ". Ear-ring in l. ear. Reddish clay with grey slip. **7**; surface.

97. Similar, with halo behind head and necklace. Height 3". Greyish red clay with thin slip. **30**; $4\frac{1}{2}$ ' below surface.

EXCAVATIONS AT BHITA.



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98. Similar, halo behind head and ring in r. ear. Height $3\frac{1}{8}$ ". Red buff clay. **42**, c ; 2' below surface.

99. Head, with hair coiled on l. side. Ear-ring in l. ear. Height $2\frac{7}{8}$ ". Red clay mixed with mica. West of **4** ; 3' below surface.

100. Head, with hair drawn back from forehead and top knot. Ear-ring in l. ear. Height $2\frac{3}{8}$ ". Clay, reddish brown. **51** ; 5' below surface.

101. Head, with hair waved from centre and bunched out on either side. Height $1\frac{7}{8}$ ". Reddish brown clay, with thin slip of same colour. **30** ; level of top floor.

102. Upper half of figures, broken from waist downwards. Height $3\frac{1}{2}$ ". Wears hood and necklace. The child lies in arms across breast. Red clay ; no slip or paint visible. **29** ; 6' below surface.

103. Similar, broken from thighs downwards, and head missing. Child at breast rests in l. arm, while r. hand holds child's l. leg. Red clay with white slip and traces of yellow paint. Height 3". **22** ; 7' below surface.

104. Similar, with head preserved and halo behind. R. hand hangs at side. Grey clay without traces of slip and paint. Height 5". Spoil earth.

105. Head, probably female, hair drawn from centre and bunched on either side, with coil on top and jewelled ornament. Ear-ring in l. ear. Height $2\frac{7}{8}$ ". Red clay with thin red slip. **30** ; 10' east of *b* ; below uppermost floor.

106. Similar, with more wig-like treatment of hair. Ear-rings in both ears. Red clay with traces of dark red paint. Height 3". **48** ; 2' below surface.

107. Similar, probably female, with fillet round forehead and binding hair at either side. Long ear-lobes without rings. Height $2\frac{1}{2}$ ". Reddish clay mixed with mica. **29**, w. edge ; 6' below surface.

108. Similar, with halo at back. Surface worn. Brownish clay. Height $2\frac{1}{8}$ ". **46** ; 7' above floor.

109. Similar, height $1\frac{7}{8}$ ". Red clay mixed with mica and traces of red paint. **28** ; surface.

110. Head, probably female, with hair falling on l. side of head only and fastened with bow above forehead. Ring in l. ear. Buff clay with thin slip of same colour. Height $2\frac{1}{2}$ ". **48** ; 4' below surface.

111. Head of *nāga* with snake head above, crudely fashioned. Height $2\frac{7}{8}$ ". Buff clay with red *matt.* paint.

112. Mould for terracotta female figure, standing with elbows out. Wears necklace, garland, and ear-rings. Hair falling down on either side of head. Full flowing skirts and narrow waist. Height $3\frac{1}{4}$ ". Grey coarse clay. **6** ; 7' below surface.

113. Horse, 5" long, with reins. Buff clay without slip or paint. **13** ; 7, below surface.

114. Horse, standing, $3\frac{1}{2}$ " high. Reddish buff clay without slip or paint. **12** ; 4' below surface.

115. Lion in relief on a potsherd. 3" long. Red and grey clay with dark red paint. **7** ; 4' above level of lower floor in **13**.

116. Ram, 3" high, standing. Mane indicated by broad collar around neck. Buff clay, without slip or paint. **30**, *g* ; between 2nd and 3rd floors.

117. Monkey, seated, with legs erect and paws joined on knees. Height $2\frac{7}{8}$. Greyish clay without slip or paint. **22**; 3' below surface.
118. Similar Height 2". Holds uncertain object under chin. L. paw on chest. Buff clay with thin reddish wash. **13**; 7' below surface.
119. Tortoise, $3\frac{1}{4}$ " long. Legs broken Buff clay without slip or paint. West of **4**; 2' below surface.
120. Bird, probably parrot; 3" high. Buff clay without slip or paint. **19**; 5' below surface.
121. Similar, standing with outstretched wings Height 3". Buff clay with white slip. **13**; 4' below surface.
122. Rattle in shape of human figure or monkey, squatting, with hands clasped under chin. It is well-baked and produces a sharp jingling sound. Greyish-buff clay, without slip or paint. **13**, *f*; 5' below surface.
123. Similar, in shape of couchant bull with rider. Height $3\frac{7}{8}$ ". Grey clay, burnt to red on the surface, with reddish wash. **41**; $2\frac{1}{2}$ ' below surface.
124. Two rattles in the shape of a hog and a bird, 3" high. The former is made of red-buff clay with reddish slip, the latter of coarse buff clay with dark red paint. Found respectively in **48**, 3' below surface, and **29**, 6' below surface.
125. Twenty-five terracotta tablets, 13 of which are either square or rectangular and vary in size from 1" square to $2" \times 1\frac{1}{2}"$. They are incised on the obverse with three parallel grooves, and are plain on the other sides, with the exception of two, which are divided on the reverse into four squares by lines crossing each other in the middle of the tablet. Each of the squares thus formed also contains shorter incisions. The remaining tablets are circular, varying from 1" to 2" in diameter. These tablets were obviously used for weights (Cf. No. 6 above) and the incisions on the square tablets must, no doubt, have reference to their respective value. They are all made of buff clay with or without slip or paint and were found in all strata, but the majority of them came from the Gupta buildings.
126. Case, with 3 compartments, such as goldsmiths use for keeping small weights in. Length $3\frac{1}{4}"$. Coarse grey clay without slip or paint. **7**; 2' below surface.
127. Two balls of red clay used for the potter's slip. Alley east of **30**, *f*; 10' below surface.
128. Spindle whorl, 1' in diameter. Grey clay without slip or paint. **29**; 5' below surface.

POTTERIES.

The following are selected specimens. The number of complete vessels found was considerable, while the potsherds were innumerable.

Primitive (wheel-turned).

There are few whole vessels of this period. The bulk of the potsherds are of dark grey clay, many of them covered with a black mucilaginous paint or glaze, which gives them a metallic lustre almost like polished steel. This ware is commonest in the pre-Mauryan period, but is found in the Mauryan



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and later period also. A variety of these has red blotches and streaks appearing on the black surface, which give them a mottled appearance, but these are probably accidental to the firing of the pottery. Specimens are shown in photos 1—6. They can hardly be later than the 8th Century B. C. Other potteries are of the common red and brown ware, which is indistinguishable from the ware of a later date.

7. Bowl. Of grey clay covered with grey black paint. Diam. $5\frac{1}{2}$ ". Bars surrounded by 3 concentric circles in centre, inside. High Street ; 19-20 foot level between **12** and **22**.

8. Cup of buff-coloured clay, covered with thin slip of same colour. Diam. 4". The base shows marks of string with which it was cut from the wheel. High Street, between **12** and **22** ; 21 foot level.

9. Similar. Diam. 3". **42** ; 17' below surface.

10. Bowl of similar clay ; convex bottom. Diam. $4\frac{1}{4}$ ". **42** ; 15' below surface.

11. Cup of pink clay with thin buff slip on outside. Diameter. $3\frac{3}{4}$ " High Street, between **12** and **22** ; 19-20 foot level.

12. Tall cup with rounded bottom. Fine grey clay, burnt to red at the edges. No slip or paint. Broken at top. Diam. at top $3\frac{7}{8}$ ", **42** ; 14' below surface.

13. Small miniature vase, $3\frac{1}{4}$ " high. Buff-red clay with thin wash.

14. Bottom of flask with neck missing. Fine buff clay with traces of vermilion paint. Diam. $2\frac{3}{4}$ ".

15. Lid of vessel or casket, broken. Diam. $4\frac{1}{4}$ ". Fine grey clay, covered with black paint inside and out. **42** ; 29' below surface.

16. Weight ; slightly broken. Diam. $2\frac{1}{2}$ " ; thickness $\frac{3}{4}$ ". Fine reddish brown clay covered with dark red paint.

17. Spindle whorl (?) with hole in centre. Red clay, sprinkled with mica. Diam. $2\frac{3}{5}$ ".

18. Scrubbing block of coarse clay mixed with small stones, with incisions to roughen surface. Length $2\frac{1}{2}$ ". **42** ; 16' below surface.

19. Bowl ; $5\frac{1}{2}$ " diam. at aperture, with raised rim. Four holes in the sides. Buff clay without slip or paint. **42** ; 14' below surface.

20. Circular terracotta weight ; diam. $1\frac{7}{8}$ ". Buff clay, with red wash. High Street, between **12** and **22** ; 17 foot level.

21. Crocodile-shaped spout, $2\frac{1}{4}$ " long. Buff coloured clay with red paint or glaze. High Street ; 2' below Mauryan floor between **4** and **5**.

Mauryan, Śunga and Āndhra.

To this period belongs the best kind of metallic lustre ware, though there are few specimens of it. The grey ware becomes less common than in the previous period.

22. Jeweller's melting pot of coarse grey clay. Diam. $2\frac{3}{4}$ ". **42** ; $10\frac{1}{2}$ ' below surface.

23. Upper portion of finial. 13" high Buff clay with red slip. **25, b** ; below floor.

24. Miniature jar, $3\frac{3}{4}$ " high. Buff clay with red slip. **25, b** ; below floor.

25. Lid with cavity in middle. Diam. at top, $5\frac{1}{4}$ ". Same clay and wash. **48**; 12' below surface.

26. Roof tile, $10\frac{1}{4}$ " \times $6\frac{1}{2}$ ". Flange on one side and socket on the other. Two holes in the upper portion and grooves down the lower portion to carry off water. Coarse buff clay. **48**; $11\frac{1}{2}$ ' below surface.

27. Bowl. $8\frac{1}{2}$ " diam. at top, with bars surrounded by 3 concentric rings in centre inside. Bottom partly broken. Grey clay, with traces of black paint. **13**, Mauryan well; 15' below top of wall.

28. Small bowl with rim curved outwards. Diam. at top $2\frac{5}{8}$ ". Buff clay with thin red slip. **7**, *u*; floor.

29. Similar. Diam. at top, 2". Similar clay and slip. **7**, *u*; floor.

30. Similar. Diam. at top $2\frac{5}{8}$ ". Grooved lines on outer side. Clay, reddish **7**, *e*; 2' below north wall.

31. Cup of pink clay with thin wash. Diam. $1\frac{1}{4}$ ". On bottom, mark of string with which it was cut from the wheel. **42**; 4' below surface.

32. Lid of vessel with flat rim turned outwards. Diam at top $4\frac{1}{4}$ ". Coarse buff clay with thin wash. **8**, *d*; $1\frac{1}{2}$ ' below bottom of west wall.

33. Lid of *chaṭṭi*, $6\frac{1}{2}$ " in diam. at top. Round top; cavity $2\frac{1}{4}$ " in diam. in centre. Buff clay with red slip. **7**, *u*; floor.

34. Similar, with deeper cavity in the middle. Diam. at top $5\frac{1}{2}$ ". Buff clay with red slip. **8**, *e*; 2' below top of north wall.

35. Miniature *hāṇḍī*; diam. $1\frac{7}{8}$ ". Buff clay with red paint. **7**, *u*; floor.

36. Miniature vase. Diam. at top 2". Deep necking. Buff clay without slip. **42**, *c*; 2' below surface.

37. Similar. Diam. at top $1\frac{1}{2}$ ". Partly broken at rim. Buff clay; no slip. **7**, *o*; floor.

38. Similar, $2\frac{1}{2}$ " high. Moulded neck with row of slanting grooved lines below. One half broken. Buff clay, thin wash. **7**, *r*; 3' below bottom of wall.

39. Similar, of coarse grey clay. Height $3\frac{1}{4}$ ". Convex sides. No wash or paint. **13**, Mauryan well; 16' below top.

40. Similar, $3\frac{1}{4}$ " high. Coarse buff clay sprinkled with mica. No wash or paint. **7**, *u*; floor.

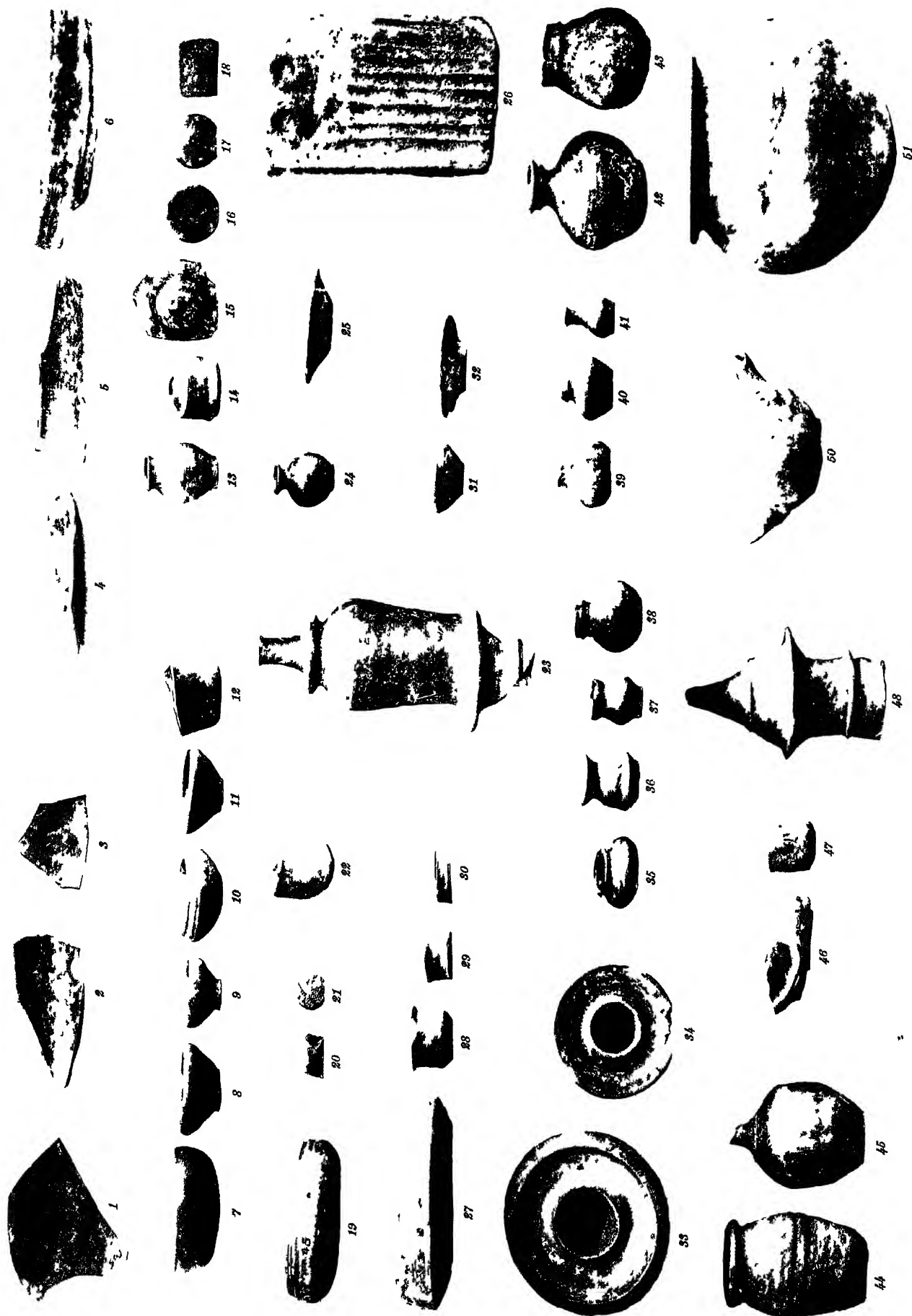
41. Similar, $3\frac{1}{4}$ " high. Tall narrow neck with flat rim and narrow aperture. Fine buff clay with red slip. **8**, *c*; 3' below bottom of wall.

42. Jar, $6\frac{7}{8}$ " high. Grooved lines around neck. Coarse buff clay with thin wash. **40**; $12\frac{1}{2}$ " below surface.

43. Similar, $6\frac{1}{4}$ " high with a shallow neck. Coarse buff clay mixed with sand. Jugs of this shape are hung upon the stems of palm-trees to catch their juice. **13**, Mauryan well; 15' below top of wall.

44. Similar, with thick rim turned outwards, $4\frac{1}{2}$ " in diam. at top. Shaped irregularly. Some rough grooved lines on the outside. Pink-coloured clay with thin wash. **42**; 5' below surface.

45. Water bottle, $8\frac{1}{2}$ " high. Neck and spout broken. Cf. No. 52 below, which is a complete example of this type. Very fine reddish clay with red paint. **40**, *c*; 15' below surface.



46. Spout of vessel, which seems to have been shaped like a tortoise. Greatest dimensions 5" and $5\frac{1}{2}$ ". Very fine buff clay with red paint. **48**, *i*; 12' below surface.

47. Goldsmith's melting pot. Diam. $2\frac{1}{2}$ ". Coarse grey clay. **40**, *d*; early floor.

48. Finial, $11\frac{3}{4}$ " high, conical at top, circular below. Decorated with projecting mouldings at intervals. Hollow inside. Broken at base. Buff clay without slip or paint. **13**, *o*; in earthen terrace below the walls.

49. Similar, $11\frac{1}{2}$ " high, in shape of hollow cylinder with mouldings on the outside. Buff clay with thin wash of same colour. **40**, *d*; floor.

50. Lamp, $1\frac{1}{2}$ " high, with handle and two tubes to hold wicks. Brownish clay without wash or colour. **48**; 12' below surface.

Kushana.

The pottery of this period is for the most part made of common buff-coloured clay with or without slip. One or two specimens are covered with a glaze.

51. *Chatti*, 1' 2" high, with rounded bottom and broad mouth. Flat rim, curved outwards. No decoration except a double incised line round neck. Buff clay with thin red wash on the upper half. **30**, *e*; lower floor.

52. Water-bottle, 8" high — the life-breathing vessel of the Chinese pilgrims (?). High top with projecting rim, pierced with small hole. Short plain spout turned upwards. Round bottom. Fine buff clay with red paint. A similar jar is preserved in the Lucknow Museum. **12**, *d*; on lower floor.

53. Water-jar, 8" high, with spout, short neck and flat bottom. Buff clay with admixture of mica. Red colour on top. **30**; lower floor.

54. Similar, 8" high, ribbed in the middle. Flat base and spout. Grey clay with thin wash of same colour. Outer or southern mound; some 3' above level of fields.

55. Similar, $7\frac{1}{2}$ " high, nearly flat at base; projecting moulding around top. Buff-coloured clay with reddish slip. Roughly sketched symbol or character and crescent near neck. **40**, outside room *f*; 11' below surface.

56. Similar, $6\frac{3}{4}$ " high, lower portion nearly hemispherical. Moulded rim. Fine buff clay, with reddish slip. **40**, *b*; 11' below surface

57. Cooking pot, $5\frac{1}{2}$ " high, with rounded base. Buff clay with red colour on upper half. **19**, *a*, lower floor.

58. Crucible, $4\frac{1}{2}$ " high, furnished with lip at the rim. Coarse buff clay without wash or slip. **40**, outside room *f*; 11' below surface.

59. Similar, $2\frac{1}{2}$ " high. Buff. clay without wash or slip. **7**; 7' below surface.

60. Bowl, 3" high, with its wall depressed in the middle. Coarse buff clay without wash or slip. **40**, *f*; 10' below surface.

61. Similar. Diam. at top $6\frac{3}{4}$ ". Same sort of clay and wash. **40**, *f*; 11' below surface.

62. Potsherd with figure of lion in high relief. Length 2". Greyish clay with red paint. **30**; red tile floor.

63. Potsherd with elephant in high relief. Trunk and feet broken. Length 2".

Buff clay, incompletely burnt Thin reddish wash. **7**; on level of early floor in **13**.

64. Melting pot in shape of bowl, $6\frac{1}{4}$ " in diam. at top, with lip in rim for pouring molten metal. Coarse grey clay without wash or slip. **23, i**; Kushana level.

65. Melting pot with rounded bottom. Diam. at top, $4\frac{3}{4}$ ". Coarse grey clay without wash or slip. **40, n**; 11' below surface.

66. Potter's dabber, $2\frac{1}{2}$ " high. Buff clay mixed with small *kankar*, covered with red colour. **13**; lower floor.

67. Circular mould for printing cloth or pottery. Flower in centre, with design of leaves around and border of dotted lines on edge. Handle broken. Diam. 4". Gray clay with wash of same colour **40**; 11' below surface.

68. Two potsherds. Reddish clay with black glaze on inside and out. **19, p**; lower floor.

69. Lower portion of finial, $15\frac{1}{2}$ " high. Same sort of clay and paint. **30, c**; lower floor.

Gupta.

70. *Chattī*, $14\frac{1}{4}$ " high. Short neck, curved outwards. Coarse buff clay without wash. **48**; 5' below surface.

71. *Chattī*, 12" high. Similar to No. 47.

72. Tall *chattī*, for storage of corn, $2\frac{1}{4}$ " high, with conical base. Band of thumb-impressions a little below neck, the intervening surface being covered with red paint. Buff clay **48**; 8' below surface.

73. Jar, 8" high. Coarse buff clay with traces of wash. **48**; 9' below surface.

74. Bowl. Diam. $5\frac{1}{2}$ " at top. Perhaps a lid of a *chattī*. Buff clay, with thin reddish wash. **48**; 10' below surface.

75. Fragment of pot with ornamental ribs. Buff clay with dark red slip. **23, e**; 10' below surface.

76. Hollow cylinder, 3" high, in the form of lower portion of a cone. Perhaps a stand for jar. Coarse buff clay. No colour or wash. **13, f**; upper floor.

77. Jar, $7\frac{1}{4}$ " high with a lip at the rim. Greyish clay with vestiges of dark red colour. **29, i**; 5' below surface.

78. Similar, 9" high with projecting bottom, and double spout. Embossed decoration in two bands. Reddish clay mixed with mica and red slip. **48**; 6' below surface.

79. Cooking pot, $4\frac{1}{2}$ " high. Reddish clay with slip. **48**; 7' below surface.

80. Ladle, $4\frac{1}{2}$ " in diam. Handle broken. Coarse clay without wash. Alley west of **19**; upper floor.

81. Lower portion of bowl, $3\frac{1}{2}$ " high. Petals of flower cut in relief around base. Grey clay with black wash. **30**; 7' below surface.

82. Goblet, $4\frac{1}{2}$ " high. Coarse greyish clay with reddish wash. **29, c**; 5' below surface.

83. Bowl, $3\frac{1}{2}$ " high. Flat projecting rim. Brown clay. No wash or slip. **40, a**; underground chamber.

EXCAVATIONS AT BHITA.



POTTERY.

84. Jar. Three holes in wall. Perhaps a cooking pot. Same sort of clay. **19**; upper floor.

85. Bowl or lid, 8" in diam. Traces of handle in middle. Fine buff clay with red slip. Alley west of **19**; upper floor.

86. Miniature *kamaṇḍalu*, $4\frac{3}{4}$ " high, with curved handle on top. Spout broken. Coarse clay; no wash. Alley between **13** and **19**; upper floor.

87. Miniature bottle, 4" high, with fracture inside. Buff clay. No wash. **30**, *b*; 3' above lower floor.

88. Roughly shaped lid, $3\frac{1}{4}$ " in diam. Three depressions for fingers in the upper side. Coarse buff clay. South of **4**; 3' below surface.

89. *Damaru*, $3\frac{3}{4}$ " high. Same sort of clay. **46**, *b*; 3' above lower floor.

90. Potter's or cloth-dyer's mould, $2\frac{1}{2}$ " high. Handle on top. Cavity in middle of lower face for blank spaces. Greyish clay. No wash. **12**; $5\frac{1}{2}$ ' below surface.

91. Semi-elliptic tile (?), $4\frac{3}{4}$ " high, with hole in the upper portion. Coarse clay. **16**; 5' below surface.

92. Finial, 16" high. Base broken. Similar clay. **25**, *a*; 5' above lower floor.

92*a*. Roof-tile, 11" × 6". Similar to No. 26 in all respects.

Late Gupta.

93. Jar with spout, $8\frac{3}{4}$ " high. Buff clay, mixed with mica. **23**; 4' below surface.

94. Jar, $5\frac{1}{2}$ " high. Very coarse clay. No wash. **29**, *i*; 4' below surface.

95. Bowl, diam. $6\frac{1}{4}$ ". Broad mouth. Buff clay; thin wash. Bastion Street; 4' below surface.

96. Similar, diam. $5\frac{3}{4}$ ". Very coarse clay. **22**, *d*; 4' below surface.

97. Miniature bowl, $1\frac{1}{4}$ " high. Inscription around neck. **30**; 4' below surface.

Mediæval.

98. Bowl, diam. 5". Buff clay with thin wash. **40**; 3' below surface.

99. Similar; diam. $3\frac{1}{2}$ ". Rough floral design round lower portion. Pink clay with thin wash. **7**; $1\frac{1}{2}$ ' below surface.

100. Miniature vase. Curved side. Buff clay with thin wash. **48**; $2\frac{1}{2}$ ' below surface.

101. Lamp, 4" in diam. Perforated handle in middle. Wick-marks on side. Coarse buff clay. **22**, *b*; 2' below surface.

STONE OBJECTS.

1. Coping stone with inscription of 2nd Century B.C. Length 2' $6\frac{3}{4}$ "; height, $10\frac{3}{8}$ "; thickness $6\frac{7}{8}$ ". Curved, as usual, at the upper edge. Two oblong tenon holes beneath. No decoration. Local sandstone. Cf. Inscriptions, No. 1.

2. Bar of railing in same stone and probably belonging to same rail. Length 1' 6"; width 9"; thickness $2\frac{1}{4}$ ". Of usual lozenge shape. F. **19**; middle of upper floor.

3. Capital of column (?) of Mauryan or Śuṅga date. Of local sandstone with tenon below and socket hole above, broken on one side. $1' 1\frac{1}{4}'' \times 9\frac{1}{2}'' \times 7\frac{1}{4}''$, including tenon. The three unbroken sides decorated with a railing in relief surmounted by an undulating floral design.

4. Fragment, perhaps of a railing, of Śuṅga style. At the corner is the lower part of a woman, nude, with girdle of three rows of beads. $5''$ high $\times 4\frac{1}{2}''$ wide $\times 2\frac{3}{4}''$ thick; local sandstone.

5. Fragmentary slab of Mathurā sandstone with portions of two panels remaining. In the proper r. panel, the l. arm of a human being holding what looks like a conventional garland. The other panel contains a peacock standing, facing l. Head and part of body are wanting. Below, on l., a vase with foliage (*ghata-pallava*). Length $11\frac{1}{2}''$. Kushāṇa (?). **15**; $4'$ below ground level.

6. Fragmentary slab of local sandstone. Rosette in low relief, containing couchant lion with a wavy leaf ornament around. About the same date as last. Length $9''$. **15**; floor level.

7. Back of head of Mauryan (?) date. The face is split off. The hair is arranged in fine strands falling down the back and confined by a band knotted at the back. Local sandstone. Height $15''$. High Street; between **12** and **22**.

8. Relief of fine slate, $6\frac{3}{8}''$ wide. Woman lying on couch, with r. elbow raised and head resting on r. hand. Behind her, dish with gourds or fruit and leaf, and, to r. male figure standing with shield (?) in r. hand and l. hand resting on legs of woman. The figure of the woman calls to mind Māyā in the conception scene. Circa 1st Century A. D. **40**, *b*; floor.

9. Relief of standing figure, holding lotus in r. hand, which is raised from elbow. L. hand on hip with garment passing through arm. Wears necklace or frontlet. Garment indicated as passing over l. shoulder. $11''$ high $\times 7\frac{3}{4}''$ wide $\times 3\frac{1}{4}''$ thick. Local sandstone. Gupta date. **9**, *a*.

10. Head in high relief, much damaged. Height $9''$. Local sandstone. Extended ear-lobes. Wears low-peaked cap tightly fitting on forehead. Gupta period. **22**, *e*.
11-12. Colossal heads of Gupta date. **19**, *j* and **30**, *f*, respectively.

13. Rough relief of local sandstone. Height $8\frac{3}{4}''$. Mahishamardini. Gupta date. South of **4**; $9'$ below surface.

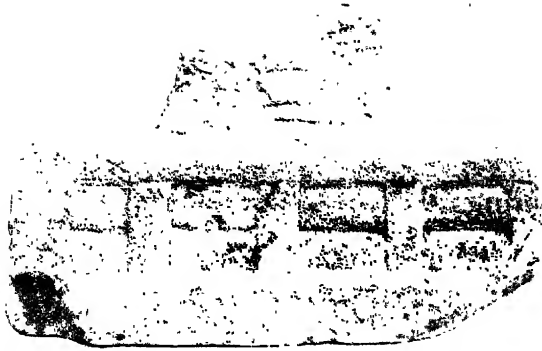
14. Similar. Same subject, but superior design. Local sandstone. Height $7\frac{1}{4}''$. Late Gupta. **31**; $4'$ below surface.

15. Relief of female figure. Hands hold uncertain objects. Local sandstone. Height $3\frac{1}{4}''$. Broken at bottom. Late Gupta. **20**; $4'$ below surface.

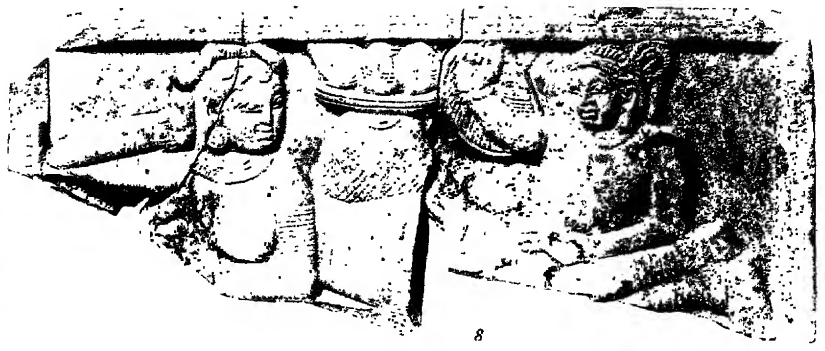
16. Fragment of standing female figure. Dress reaching to ankles; left hand by side, holding edge of robe. Broken above waist and below ankles. Local sandstone. Height $3\frac{1}{2}''$. Late Gupta. **27**, *b*; $7'$ below surface.

17. Fragments of halo, decorated with twisted garland interspersed with crocodiles, birds and animals, and enriched with bead and reel and lotus borders. Of grey slate. Larger fragment measures $5'' \times 6\frac{1}{4}''$. Kushāṇa period (?). **23**, *k*.

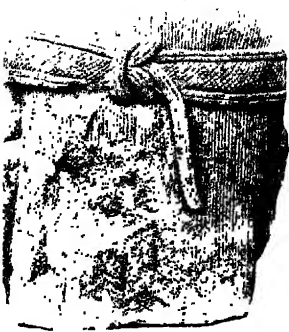
18. Similar, of Gupta period. Decorated with floral band, and twisted garlands bordered by beads, and scalloped at the edge in the Mathurā style. Local sandstone. $6'' \times 3''$. **21**, $6'$ below surface.



3



8



7



9



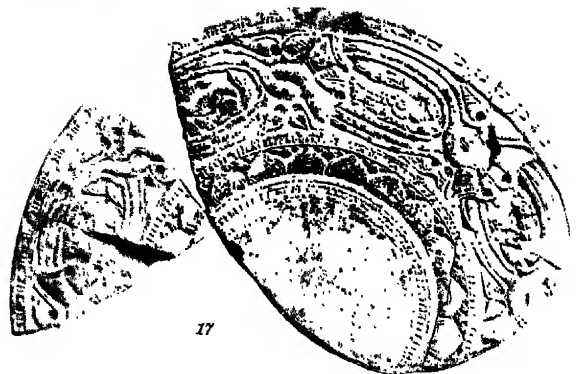
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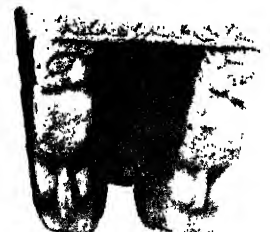
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20



21



22

STONE OBJECTS.

1

1 1 1 1

19. Similar, of Mathurā stone, with figure in supplicating attitude to l., and flying gandharva above. Height 9". 7; 6' below surface.

Grind Stools, Slabs, etc.

These belong to all periods represented on the site except the primitive, which has yielded relatively few objects. They are all of approximately the same shape, but are decorated with a variety of designs characteristic of the period to which they belong.

20. Leg of stool, decorated with conventionalised honeysuckle ornament. Height $7\frac{1}{2}$ "; width $5\frac{7}{8}$ ". thickness $3\frac{3}{8}$ "; Local sandstone. 1st Century B. C. 48; 13' below surface.

21. Approximately of same date. The winged lion rampant is carved, as in the Karle capitals, in two planes forming a right angle to each other at the corner. Local sandstone. Height $9\frac{3}{4}$ "; width $8\frac{1}{4}$ "; thickness 3".

22. Two legs of same period. Winged lions rampant. Local sandstone. Height $7\frac{1}{2}$ "; width $6\frac{3}{4}$ "; thickness 7". 7; level of floor in 13.

23. Half a stone of same period, decorated with lightly incised lines in chevrons, dots and rough floral designs. Length $10\frac{1}{2}$ "; height 9"; thickness $6\frac{3}{4}$ ". Local sandstone. 23, j.

24. Complete stool of early Gupta period. Local sandstone. 1' 6" long \times $10\frac{1}{2}$ " high \times 8" wide. Decorated with leaf design, quarter lotus, waves, and dots. 13; upper floor.

25. Of late Gupta date. Local sandstone. Length $16\frac{3}{4}$ "; height $9\frac{3}{4}$ "; width $8\frac{3}{4}$ ". Decoration of incised lines, very rough.

26. Grinding slab. Length 18"; width 10"; thickness $2\frac{3}{8}$ ". Local sandstone. Gupta. Several such slabs were found in the Kushana and Gupta levels. The upper surfaces are roughened with lightly incised chevrons, dots or lines in the middle and decorated with a more elaborate design at one or both ends.

27-8. Accompanying the grind stools and slabs were numerous stone rollers complete or fragmentary, averaging 9 or 10 inches in length.

Stone Slabs.

These are probably *Ayāgapaṭṭa* slabs, but no dedicatory inscriptions have been found on any of them.

29. Circular, of fine green slate, with lotus-decorated border. Diam. $3\frac{5}{8}$ ". Kushana (?).

30. Circular; broken. Diam. $4\frac{1}{8}$ ". With *Kūrmachakra* at top. 19; top of south wall.

31. Of same material and date; probably oblong, but broken. Decorated in two corners with vase and *svastika*. Width $3\frac{1}{2}$ ".

32. Similar to last, with circular concave depression in centre. Width $3\frac{1}{8}$ ". 7; 7 below surface.

33. Square, of dark red local sandstone, decorated with circular band of lotus leaves, and larger leaves in corners. $5\frac{3}{4}$ " square. 46, h.

34. Square, with rougher design. Local sandstone. $5\frac{1}{4}$ " across. Kushana date (?). **23, a**; 12' below surface.

35. Circular slab of steatite, of Mauryan date, perhaps for stamping gold leaf medallions. Similar slabs were found by Dr. Bloch at Basārḥ. Cf. also the gold leaf from Piprahwa *stūpa* in Calcutta Museum. The decorated surface is convex and ornamented with a continuous spiral *motif* inside border of lines. Diam. $3\frac{7}{8}$ ". **23, k**; 16' below surface.

Catapult or Sling Balls.

These range in size from $1\frac{1}{3}$ " to $8\frac{1}{2}$ " diam. and are of various stones or of clay. Those of the Mauryan period are admirably cut, being absolutely spherical and chiselled to a perfect finish.

Steatite and Marble Boxes.

These date from the earliest to the latest periods represented on the site, the best workmanship being of the Mauryan, Śunga and Āndhra periods. All are turned on the lathe.

36. Top of casket furnished with handle and decorated on outside with concentric mouldings. Diam. $3\frac{1}{2}$ ". Mauve and white steatite. Primitive. **42**; 21' below surface.

37. Two fragments of a lid of box. Grey-white steatite. The lid was furnished with a rim and handle and decorated with two concentric lines at the edge on the outside and one inside the lid. Mauryan. **42**; 11' below surface.

38. Bottom of flat box with rim and three concentric lines on outside. Diam. $2\frac{7}{8}$ ". Greenish grey steatite, with mauve. Primitive. **42**; 20' below surface.

39. Bottom of casket, without base. Yellowish steatite, veined with mauve. Height 2" Mauryan. **42**; 9' below surface.

40. Complete box, of grey mauve colour. $2\frac{1}{3}$ " high. Of rather coarse workmanship, furnished with handle at top and decorated with simple designs lightly incised. **7, m**; floor.

41. Fragment of lid and bottom, fitting together with perfect accuracy. Mauve and red steatite. $4\frac{1}{3}$ " across. Handle and bottom broken away. Adorned with five concentric lines only. **7, m**; floor.

42. Spherical base of greyish mauve steatite with incised design. Diam. $1\frac{1}{16}$ ". **13, i**; foundations.

43. Base of casket of white-mauve steatite, with rim and two incised lines on outer surface. Diam. $1\frac{1}{2}$ ". **7, m**; floor.

44. Spherical lid of casket of red steatite, finely turned, with concentric lines of decoration on outside. Diam. when complete, $1\frac{3}{4}$ ". **42**; $3\frac{1}{2}$ ' below surface.

45. Base of casket with rim and foot moulding. Grey white steatite. Pre-Kushana period (red). Diam. $2\frac{3}{8}$ ". **7**; 2' above floor.

46. Lid of casket. Grey and red marble with handle at top. Diam. $3\frac{1}{8}$ ". Gupta.

47. Ditto; of same date. Grey steatite, decorated with simple linear designs. Diam. $3\frac{1}{4}$ ".

48. Bottom of casket furnished with rim and decorated with cross hatchings on outer surface. Diam. $2\frac{1}{4}$ ". Deep mauve steatite. Late Gupta. 45 ; 4' below surface.

Neolithic Implements.

1. Wedge-shaped celt of basia rock, ground and polished. Kushana. 13, i ; lower floor.
2. Wood splitter (?) with curved edge ; of local sandstone. The sides are rough and show marks of cutting. Kushana. 13, i ; lower floor.
3. Celt of diabase, nearly oblong, $2" \times 1\frac{5}{8}"$. Cutting edge damaged. Kushana (?). High Street ; in debris over concrete floor between 3 and 4.
4. Wedge-shaped celt of diabase, $2\frac{1}{4}"$ long \times $1\frac{3}{4}"$ board. Kushana or Gupta. 50, central chamber ; 12' below surface.
5. Similar in shape to No. 3, of slate. $3\frac{1}{4}" \times 1\frac{5}{8}"$. Rough, unpolished surface. Cutting edge very sharp but damaged. Gupta 13, b ; upper floor.
6. Similar to No. 2, of sandstone. $6\frac{1}{4}" \times 4"$. The sharpened edge is curved. Circa 6th Century A. D. 30 ; $4\frac{1}{2}'$ below surface.
7. Similar to No. 1, of diabase. $1\frac{5}{8}"$ long \times $1\frac{3}{4}"$ broad, with rounded sides. 8th or 9th Century A. D. 29 ; 2' below surface.
8. Similar and of same stone. $3\frac{3}{4}"$ long \times 3" broad. 8th or 9th Century A. D. 28 ; 2' below surface.

COPPER AND BRASS OBJECTS.

Some of the following articles are of brass, some of copper, but it has not yet been possible in every instance to determine the metal. The process of manufacture was, in most cases, casting ; but a few of the objects have been hammered out. As the majority of these articles were used for sacrificial purposes or for personal decoration, it seems obvious that the use of copper or bronze for household utensils was not common—at any rate, in the Gupta period, to which most of these objects belong.

Sacrificial and other Objects.

1. Small bell (*ghaṇṭikā*) of bronze or copper. Height $2\frac{1}{4}"$. Ring at top. The tongue is missing. Bells of this type are used for ringing during worship or are hung from the neck of animals. Kushana. Alley to the N. E. of 30 ; $1\frac{1}{2}'$ above the floor.

2. Miniature bowl of copper. Diam. at aperture 2". Kushana. 40, l ; $4\frac{1}{2}'$ below bottom of late Gupta walls.

3. Lid of box with hollow cylindrical handle and rim turned downwards. Incomplete. Cast and turned on lathe. Kushana. 31, b ; floor.

4. Female statuette in the round, standing. Height $4\frac{1}{2}"$. Of copper. The head is hollow, the rest being solid. Both hands stretched out, with fingers closed. No traces of drapery. Girdle indicated by three incisions round the waist. Large circular ear-rings, necklace, garland, armlets (*bahattas*), bangles and anklets (Skt. *nūpura*). Pose stiff. Execution poor. Cast in mould. Gupta. 7 ; $4\frac{1}{4}'$ below surface.

5. Tripod (*tripadī*), $1\frac{3}{4}$ " high, with curved legs and triangular top containing three oval-shaped hollows, one in each corner. This is a sacrificial vessel and the hollows in the top seem to have been intended for holding three offerings, viz.:—rice (*akshata*), sandal-paste (*chandana*), and sesamum (*tila*). There is no decoration beyond a three-petalled projection at each angle of the top. Cast in mould. This form of *tipāzī* seems to have gone out of use at the present day. Gupta 45, e; 2' below bottom of room d.

6. Similar, with cavities in top shaped like betel leaves. One leg broken. Gupta. 19; 6' below surface.

7. Copper basin, $2\frac{5}{8}$ " in diam. supported on three curved legs. Height $1\frac{3}{8}$ '. Similar vessels are now used for bathing the idol in and this is probably the purpose to which it was put in past days. No decoration Gupta. A similar vessel was found at Kasia.¹

8. *Tipāzī* or tripod, $3\frac{3}{4}$ " high, consisting of an open circular frame held on three legs curved in the upper part and flat and hollow at the base. The open frame at the top is decorated with projecting hoods at equal distances from one another. The stand was meant to hold the *tāmrakunḍa* (see next entry) in which the idols are bathed. Late Gupta. High Street, near 12; 3' below the surface of the mound.

9. Circular *tāmrakunḍa* with high rim used for bathing the idol. Diam. $3\frac{1}{4}$ "; height $\frac{7}{8}$ ". Cast in mould, the line decoration which occurs near the top and base being incised on lathe. Kushāṇa (?), 23, f; floor level.

10. Shallow saucer of copper. Diam. at top $4\frac{1}{2}$ ". May have been employed to hold flowers or some objects of worship Early Gupta. 31, b; 14' below surface.

11. Bell, similar to No. 1. Height $1\frac{5}{8}$ ". Gupta. 7; 7' below surface.

12. Cup of copper, much worn. Diam $3\frac{1}{2}$ ". Gupta. 31, a; underground chamber.

13. Circular lid of copper with flat rim and a disc-like handle on top. Diam. $2\frac{1}{2}$ ". Skilful cast work. Gupta. 23; 6' below surface.

14. Cooking pot (*hāṇḍī*) of beaten copper. Diam. 6". Incised lines on shoulder neck and rim. Gupta. 31, a; underground chamber.

15. Spherical cymbal (*mandīrā*) of copper or bronze with flat rim. Diam. $2\frac{1}{3}$ ". Hole in bottom for suspension string. Appears to have been cast and finished on lathe. Circa 7th Century A.D. Bastion Street, near circuit wall; $3\frac{1}{2}$ ' below surface.

16. Saucer, similar to No. 10 Diam. 6". Much mutilated. Circa 7th Century A.D. 13; $3\frac{1}{2}$ ' below surface

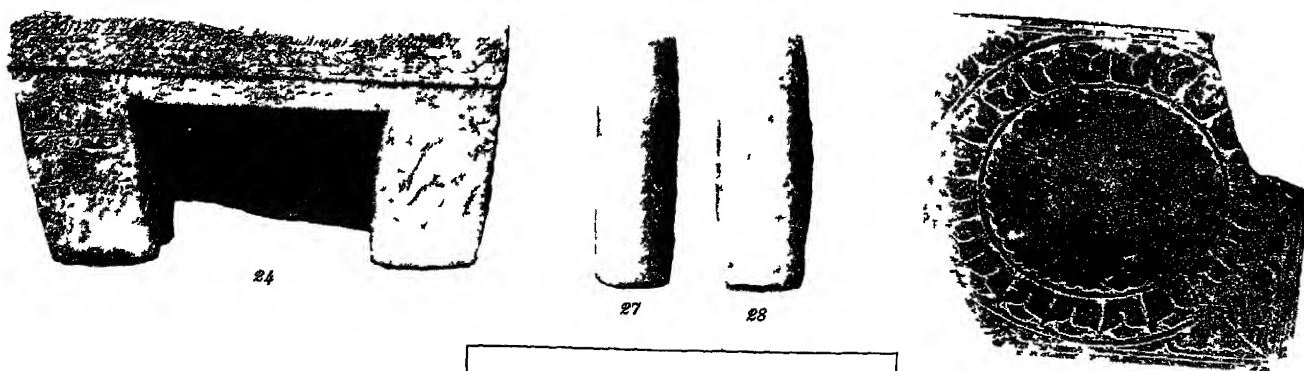
17. Bowl of copper. Diam. 3" to 4". 7th or 8th Century A.D. 12, d; 3" below surface.

18. Oval-shaped rattle (*jhuñjhuñā*) with perforated sides and handle, $2\frac{1}{2}$ " long. Total length $4\frac{3}{4}$ ". Five rows of holes, circular or triangular. The rattle sound is produced by a small piece of iron inside Circa 7th Century A.D. Bastion Street; $3\frac{1}{2}$ ' below surface.

Ornaments.

19. Copper or bronze armlet. Diam. $2\frac{3}{8}$ ". Thick at one end and thin at the

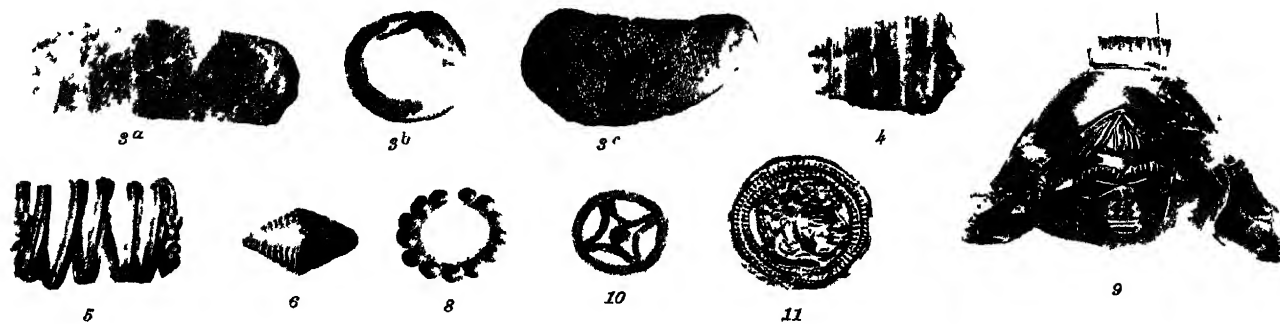
EXCAVATIONS AT BHITA



NEOLITHIC OBJECTS



STONE OBJECTS NOS. 24-48.



GOLD OBJECTS AND JEWELLERY.

other, like the *ananta* (named after the *Sēsha* on whom *Vishnu* reposes) worn in modern times. A few lines scratched on the thick end would seem to represent the hood of the snake. Found on the early floor in **40**.

20. Bangle of copper. Diam. $2\frac{5}{8}$ ". Probably cast. Mauryan. **23, j**; 16' 5" below surface.

21. Copper rod, $4\frac{1}{2}$ ' long, thick at both ends and thin in the middle; intended for a bangle like No. 23. Mauryan or Śunga. **42**; 7' below surface. Several similar specimens came to light in other parts of the site.

22. Bangle of copper, with ends coiled round. Diam. $2\frac{1}{8}$ ". Gupta. Found in **13**; 7' below surface.

23. Bangle of copper, with thick ends. Diam. $2\frac{3}{8}$ ". Gupta. **13**; 7' below surface.

24. Pendant of copper ($2\frac{1}{2}$ " \times 1"), shaped like a *pīpal* leaf and decorated on one side with an incised flower pattern. Such articles are still hung from the necks of buffaloes. 6th or 7th Century A.D. **13**; 6' below surface.

25. Finger-ring of copper. Diam. $\frac{3}{4}$ ". The socket which held the gem is empty. Circa, 7th Century A.D. **46, a**; 4' below surface.

26. Finger-ring of copper or bronze. No socket for gem. Mediæval. **23**; 2' below surface.

IRON OBJECTS.

1. Bell (*ghaṇṭikā*) of iron, $2\frac{3}{4}$ " high. Ring of the same substance at top. A similar ring inside held the tongue which is missing. 2nd or 1st Century B.C. **23, e**; below early floor.

2. Hatchet, 6" long, $2\frac{1}{2}$ " broad. Foundations of **13, o**.

3. Circular disc of iron. Diam. 3". **42, c**; 2' below surface.

4. Chisel, $6\frac{1}{2}$ " long, $1\frac{1}{2}$ " broad. Foundations of **12, b**.

A similar chisel was found in **42, c**; 3' below surface.

5. T-shaped object, $3\frac{1}{4}$ " high, perhaps used for breaking molasses. Śunga or Āndhra. **42**; 5' below surface.

6. Hatchet, 7" long \times $3\frac{3}{4}$ " broad. Kushana. **30, c**; early floor.

A similar hatchet was found in **23, j**; early floor.

7. Padlock of old type (*muṭṭhā-kā-tālā*) such as is still used in some parts of India. It consists of a cylindrical barrel $3\frac{1}{2}$ " long, with a horizontal bar, $5\frac{1}{2}$ " long on top. In fastening the padlock a piece of iron is slid on the horizontal bar, while the lower end of the piece runs into the barrel. Gupta. **28, b**; 6' below surface.

8. Arrow-head without flanges. Length $5\frac{1}{8}$ ". Gupta. **13, i**; 5' below surface.

9. Hatchet, $3\frac{1}{4}$ " long and $1\frac{7}{8}$ " broad at the edge. Gupta. **7, court**; 6' below surface. Another hatchet of about the same date was found to the south-west of **19**; 6' below surface.

10. Portion of a hollow sphere of iron. Diam. $3\frac{1}{8}$ ". Purpose unknown. Gupta. **27**; 6' below surface.

11. Chisel (*chhēnā*), 6" long \times 1½" broad ; similar to No. 4, Gupta. **28** ; 5' below surface.
12. Sickie, with curved blade, 6¾" long, and spiked end (5¾") to fit in wooden handle. Gupta. **19** ; débris above upper floor.
Two other sickies of the same type were found in **30** ; 6' below surface.
13. Plate of iron, 4" \times 2½", pierced with several holes, and presumably used as a tie-plate on a door. Gupta. **7** ; 6' below surface.
14. Portion of spoon or ladle, 6" long. Gupta. **13** ; 5' below surface. A portion of another iron spoon was also found in the same house.
15. Ring. Diameter 2½". May have been used as a door-handle. Gupta. **7** ; 6' below surface.
16. Handle of *lōtā*. Gupta. **13**, *l* ; 7' below surface.
17. Wedge-shaped hand anvil, 2¼" high. Circa 6th Century A. D. **48** ; 4' below surface.
18. Blade of dagger, 8¼" long, with double edge. Circa 6th Century A. D. **18** ; 4' below surface.
19. Blade of *kawñchā*, used by confectioners in the preparation of *halwā* and other things. The handle is broken, but was originally three or four feet long. Circa 6th Century A.D. **22**, *e* ; floor.
A similar but smaller object was found in **7** ; 2' below surface.
20. Arrow-head with flange, 2¾" long. Circa 6th Century A. D. Found in **9**, in débris on floor.
21. Barrel-shaped object, 2" long. Circa 6th Century A. D. Bastion Street ; 5' below surface.
22. Curved rod, 11" long, forming the handle of an elephant goad (*ankuśa*). Circa 7th Century A. D. **13** ; 3' 6" below surface.
23. Dagger or finial, 20" long. Late Mediæval. **13** ; 2' below surface.

GOLD OBJECTS.

1. Minute fragment. ¼ grain. Primitive. **42** ; 29' 3" below surface.
2. Fragment of gold leaf. 3½ grains. Primitive. **42** ; 22' below surface.
3. Three pieces of pure hammered gold, weighing 807, 546 and 638 grains, respectively. Mauryan. Pit in High Street between **12** and **22** ; 15'-16' below surface.
4. Cylinder of thin plate decorated with four bands of triple plaits, finely executed. Length 7/8". 23 grains. Mauryan. **8** ; below bottom of N. E. wall.
5. Serpentine finger-ring of six coils. The coils are composed of a flat band, ribbed down the centre, which terminates in a *vajra* ornament. Diam. ¾". 67 grains. Mauryan or Śunga. **13**, *n* ; 12' below surface.
6. Bead in shape of double cone, hollow, and fluted on one side ; 1 1/16" long. 6 grains. Kushana or Gupta. **48**, *m* ; 10' below surface.
7. Hollow bead, broken. ½ grain. Gupta (?). **7** ; well.
8. Ring, edged with beading on both sides. Diam. 1 2/3". 137 grains. Gupta. **31**, *d*.
9. Two miniature beads joined together. 7 grains. Gupta. **31**, *d*.

10. Flat wheel with axle and spokes. Diam. $\frac{5}{8}$ ". 11 grains. Gupta. **19**; 7' below surface.
 11. Disc of gold, embossed with human face. Gupta. From spoil earth of **41**.
 12. Hollow bead. Diameter $\frac{1}{4}$ ". Mediæval. N. W. of **9**, f; 4' below surface.

IVORY OBJECTS.

1. Fragments, probably belonging to piece of furniture. Turned on lathe, and decorated with torus and other mouldings. Diam. $1\frac{3}{16}$ ". **42**; 11' below surface.
 2. Seal-die (?) without legend or device. $\frac{3}{4}$ " \times $\frac{3}{4}$ " \times $\frac{9}{16}$ ". Ditto.
 3. Bottom of miniature casket. Diam. $\frac{1}{8}$ ". Turned on lathe, with mouldings at base and rim.
 4. Die. Numbers from one to four indicated by concentric circles on four sides. $1\frac{5}{8}$ " \times $\frac{3}{8}$ " \times $\frac{3}{8}$ ". **29**, q; 2' above level of floor in adjoining room.
 5. Ditto. Slightly broken. $2\frac{1}{4}$ " \times $1\frac{7}{8}$ " \times $1\frac{7}{8}$ ". Ditto. **19**; between the upper and lower floors.
 6. Ditto. Complete. Ditto. Ditto.
 7. Ditto. Ditto. $2\frac{5}{8}$ " \times $\frac{3}{4}$ " \times $\frac{3}{4}$ ". **7**; near the surface.
 8. Ditto. Broken. $1\frac{3}{8}$ " \times $1\frac{7}{8}$ " \times $1\frac{7}{8}$ ". Main Approach, near structure No. 3, at the level of the concrete floor.
 9. Flat piece. $4\frac{9}{16}$ " \times $1\frac{1}{16}$ " \times $\frac{1}{4}$ ". Upper side carved with *svastikas*, small circles and lines. Narrow groove in the middle of lower side. Purpose uncertain. **13**, l; below foundations.
 10. Bobbin¹ (?) pointed at ends, but unpierced. Length $3\frac{1}{8}$ ". **7**, O; floor.
 11. Unguent bottle (?). Three incised rings at rim. Similar at base, with concentric circles and cross hatchings. Length $3\frac{1}{4}$ ". **22**, O; 5' below floor.
 12. Casket. In five fragments. Decorated with incised rings, turned on lathe. Diam. at base $2\frac{1}{8}$ ". High Street, early floor, between **12** and **22**.

BONE OBJECTS.

1. Die. Numbers from one to four indicated by concentric circles on four sides. 2 " \times $\frac{3}{8}$ " \times $\frac{3}{8}$ ". **31**, a; $15\frac{1}{2}$ ' below surface.
 2. Ditto. Charred. $1\frac{1}{2}$ " \times $\frac{3}{8}$ " \times $\frac{3}{8}$ ". **29**, m; floor near drain.
 3. Ditto. Ditto. Ditto. Ditto.
 4. Ditto. Broken and charred. $1\frac{1}{16}$ " \times $\frac{3}{8}$ " \times $\frac{3}{8}$ ". Bastion Street, eastern end; 8' 6" below surface.
 5. Ditto. Complete, $1\frac{1}{8}$ " \times $\frac{3}{8}$ " \times $\frac{3}{8}$ ". **22**, x.
 6. Ditto. Ditto. $1\frac{3}{4}$ " \times $\frac{3}{8}$ " \times $\frac{3}{8}$ ". **13**; floor level.
 7. Ditto. Ditto. 2 " \times $\frac{3}{8}$ " \times $\frac{3}{8}$ ". **48**; 4' below surface.
 8. Ditto. Much worn. $2\frac{1}{4}$ " \times $\frac{3}{8}$ " \times $\frac{3}{8}$ ". **7**; 7' below surface.
 9. Fragment of furniture (?). Turned on lathe. Ornamental mouldings outside. Length $1\frac{1}{2}$ ".
 10. Uncertain object, hollow at end and provided with rim. Diam. at base $\frac{1}{2}$ ". **22**, x.

¹ Sir A. Cunningham regarded these *bobbins* as nails. Cf. *A. S. R.*, Vol. III, p. 51.

11. Decorative fragment. Length $2\frac{7}{16}$ " 7; 7' below surface.

12. 67 bobbins (?), pointed at both ends and unpierced. Length $3\frac{5}{16}$ " to $1\frac{7}{8}$ ". 42, eastern portion; 14' below surface.

13. Pin (?), pointed at one end. Length $4\frac{5}{16}$ ". 7; 3' higher than lower floor in 13.

14. Fragment of furniture (?) charred, turned on lathe, and ornamented with mouldings. Length $1\frac{5}{16}$ ". 40, west cutting; 6' below surface.

SHELL OBJECTS.

1. 48 beads, pierced for stringing. Average Diam. $\frac{3}{16}$ "- $\frac{1}{8}$ ". 43.

2. 80 beads, spherical and flat. Average Diam. about $\frac{1}{4}$ "- $\frac{1}{8}$ ". 43.

3. Bead. Diam. $\frac{7}{16}$ ". Bastion Street; 8' below surface.

4. Bracelet. Undecorated. Diam. $2\frac{1}{4}$ ".

5. Ditto. Fragment. Diam. $2\frac{3}{8}$ ". 29, q; floor level.

6. Ditto. 28 pieces. Some plain and others with ornamental grooves on the outside. 25; floor.

7. Portion of shell from which bracelets have been cut. Diam. $\frac{11}{16}$ ".

8. Ring. Diam. $\frac{11}{8}$ ". 42; 16' below surface.

GLASS OBJECTS.

1. 75 small black beads. Eastern gate of city; concrete floor.

2. 2 fragments of azure blue bead. Length $\frac{3}{8}$ ". 40, j; floor.

3. Blue bead. Length $\frac{3}{16}$ ". 47, f; 6' below surface.

4. 46 green, polygonal beads. Diam. $\frac{3}{8}$ "- $\frac{1}{8}$ ". 43.

5. Green, polygonal bead. Diam. $\frac{1}{4}$ ". 13, room i; lower floor.

6. 2 beads covered with thin layer of gold leaf. Diam. $\frac{3}{8}$ " and $\frac{1}{8}$ " respectively.

43.

7. 3 bluish beads. Diam. $\frac{5}{16}$ "- $\frac{3}{16}$ ". 43.

8. Deep blue bead. Fragmentary. Diam. $\frac{7}{16}$ ". 45; 8' 2" below surface.

MISCELLANEOUS OBJECTS.

1. 300 small flat coral beads. Diam. $\frac{3}{16}$ "- $\frac{1}{8}$ ". 52; west of b.

2. Spherical bead of cornelian. Diam. $\frac{1}{4}$ ". Ditto.

3. Oblong bead of topaz (?). Length $\frac{5}{16}$ ". Ditto.

4. 3 buttons of mother-of-pearl. Diam. $\frac{1}{2}$ ". 30, c; $3\frac{1}{2}$ ' above floor.

5. Fragment of amygdaloid bead of hard clay. Length $\frac{3}{4}$ ". 40; early floor.

6. Agate bead. Diam. $\frac{3}{16}$ ". 13, room i; lower floor.

7. 4 beads of rock crystal of various sizes and shapes. Diam. $\frac{3}{8}$ " $\frac{1}{16}$ ". 43.

8. Bead of lapis lazuli. Diam. $\frac{5}{16}$ ". 43.

9. Crystal pendant. Human face roughly incised on one side. Gupta date. 43. Pl. XXXII, Jewellery, 9.

EXCAVATIONS AT SAHRI-BAHLŌL.

The present paper is intended to furnish a record, more detailed and more fully illustrated than that contained in my Annual Report for 1911-12, of the excavations which I effected this year at ruined mounds scattered around the village Sahri-Bahlōl, some eight miles to the west of Hōti-Mardān, in the Peshawar District. The excavations, commenced on February 21st, 1912, and carried on without a day's interruption until the first week in April at a total expense of Rs. 4,204 resulted in the clearing of six mounds, the local condition permitting the constant employment of a relatively large number of labourers. All mounds proved to contain the remains of Buddhist places of worship which had remained in more or less continuous occupation from the Kushana period down to that of the Little Kushanas, in one instance even later. Apart from valuable information yielded on various points of general antiquarian import concerning the construction of these shrines, the chronology of the site, etc., the excavations brought to light a great quantity of sculptures in the Græco-Buddhist style of Gandhāra, representative of its successive phases and often of considerable iconographic interest. The abundance of these sculptural materials recovered is sufficiently indicated by the fact that the total number of pieces selected for reproduction in the inventory photographs, many of them, of course, mere fragments, but none the less often of distinct interest, amounts to over 1,200, and that the careful packing of the sculptures deserving removal to the Peshawar Museum kept my whole staff and myself busy for over two weeks after the completion of the excavations.

The close study of these new materials will cost much time and labour; nor will this become possible until after the sculptures will have been unpacked and arranged in the Peshawar Museum, a task for which time has not yet been available. Even then the elucidation of all interesting iconographic details will claim the help of experts specially conversant with that line of research. In view of these facts I must be content with making this paper a record of the essential archæological observations gathered on the spot and with briefly noticing and illustrating specially interesting specimens among the art 'finds'.

The site of Sahri-Bahlōl had attracted attention by its abundance of sculptural remains ever since the collecting of 'Buts' for presentation or sale to European

officers started in the Peshawar Valley. Operations conducted for Dr. Bellew in the sixties, on lines scarcely more systematic, had yielded some remarkably fine statues and reliefs. But it was Dr. Spooner's merit to have first recognized the importance of the site and to have started its archæological exploration by the excavation of two ruined Buddhist shrines in 1907 and 1909-10, respectively.

In view of the accounts furnished by Dr. Spooner in the Annual Reports for those years there is no need to give here a general description of the site.¹ But it will be useful to discuss certain topographical observations which help to explain the relatively large number of ancient mounds traceable in this locality and the character of those so far excavated. Reference to the large scale map of the vicinity which Dr. Spooner caused to be prepared in 1910 by Mr. A. J. Wilson, late of the Survey of India, and which was reproduced in my Annual Report for 1911-12, will make it easier to follow these remarks.

The village of Sahri-Bahlöl, with the ground surrounding it within a radius of upwards one mile, is situated in a depression which offers considerable natural advantages for cultivation. On the one hand, it is assured a good deal of subsoil moisture by a permanent water-course, the Murdāra stream, which winds through it from the north-west and drains towards the Kalpānī to the south-east. On the other, it is singularly clear of those deeply eroded torrent beds or 'Khwarez' coming down from the foot of the Swāt hills which cut up elsewhere so much of the fertile ground along the northern side of the Peshawar Valley and rendered artificial irrigation there practically impossible until the advent of modern engineering. A look at Sheet 38 $\frac{N}{15}$ of the new and much improved one mile to the inch map of the Survey of India will show to what extent this favoured position of the vicinity of Sahri-Bahlöl is due to the protection offered by the little hill chain of Takht-i-Bahī rising boldly about two miles further north from the alluvial slope of the valley. But it is scarcely necessary to take account of this *quasi*-geological explanation in order to realize that the nature of the ground surrounding Sahri-Bahlöl, which is kept moist and easily inundated by the Murdāra stream, must have assured it special fertility in the old days when irrigation far away from the great rivers was otherwise difficult in Gandhāra. To this favoured position, I believe, we must attribute the existence at this spot of the large ancient settlement of which the high and wholly artificial mound occupied by the present Sahri-Bahlöl village and the series of mounds big and small surrounding it afford striking evidence.

That the central mound, nearly one-fourth of a mile long and about a furlong across, marks the position of a once fortified small town, is clearly proved by the foundations of massive walls cropping out at many points of the slopes, to which due attention has already been called by Dr. Spooner.² That this nucleus sheltered but a portion of the population becomes evident on examining the series of extensive mounds which stretch in a kind of inner semi-circle round it, beginning with the mound nearest to the Swāt Canal in the north-east marked in the map (with the elevation of 1,069 feet) and reaching to the conspicuously high mound marked 1106 in

¹ Comp. *Annual Report*, Frontier Circle, 1906-07, pp....; *idem*, 1909-10, pp...; and in particular the detailed account in *Annual Report*, Archæol. Survey, 1906-07, pp. 102 sqq.

² See *Annual Report*, 1906-07, p. 103.

the north-west.¹ For all these reveal themselves by their size, relative height and abundant pottery débris as sites of *quasi*-suburban villages occupied for prolonged periods. Their more or less contemporary occupation is proved by the similarity of the surface débris and of the coin finds which generally range from the Kushāna period down to that of the 'Hindu Shahis of Kābul.'

At first sight it might appear more difficult to account for the survival of the numerous small and low mounds, close on two dozens in all, which the map shows scattered all round that inner ring of big mounds, within a radius of about one mile and also immediately to the north of the central site. But closer examination of the ground furnishes for this, too, an adequate explanation. The moist and in places easily inundated condition of the soil necessarily induced later settlers to select for their dwellings spots which the ruins of more substantial buildings had raised, however slightly above the alluvial flat. The remains of outlying ancient hamlets, built, no doubt, like the great mass of modern cultivators' dwellings in the plain of the Peshawar Valley, of mere clay, have disappeared completely. But the low mounds which resulted from the decay of ancient shrines near them and which under other conditions would have easily disappeared under the ploughshare, were on such ground bound to invite successive occupation and thereby to receive some protection.

The process just indicated is fully illustrated by what has taken place around Sahri-Bahlöl since the construction of the Lower Swāt Canal, some thirty years ago, caused a great increase in cultivation and population in this tract, and by what is still going on as it were under our own eyes. A number of new hamlets, like Damāmē or those called after their first settlers Sāduddin Korūna, Gulpūr Korūna, Salārai Korūna, Qāsim Korūna,² have been built on low mounds which from fragments of sculptures found on unoccupied portions of the ground or built into dwellings, can safely be assumed to mark the position of Buddhist places of worship. For others of these low mounds which had as yet escaped being selected for homesteads and hamlets, the sculptured fragments easily picked up among the scrub covering the surface plainly indicated that Buddhist shrines lay buried beneath them. In their case it was often possible also to trace signs suggesting that at one later period or another dwelling places of the usual humble type had been erected above the ruins.

But the scanty débris layers left behind by such mud-built hovels would have been quite insufficient to protect the remains from the destructive effects of that 'unauthorized digging' for sculptures which went on all through the second half of the last century. These mounds so plainly disclosing their character would accordingly have been dug up long ago by the local villagers and others eager to supply 'Buts' to Europeans but for the fortunate circumstance that the whole of the area was the property of the powerful Khāns of Mardān and Hōti. These prevented the usual indiscriminate digging which has caused the destruction of so many important

¹ I do not think that the accuracy of these height marks of the detailed map can be relied upon. They do not appear to have been obtained by careful levelling and have at several points proved manifestly inexact. But like the height readings round a famous modern 'site' (Port Arthur) they may serve as convenient designations for otherwise nameless positions.

² *Korūna*, plur. of *kor*, means 'houses' in Pashtu. Damāmē, though not marked as a mound in the map, is locally known to have been built at a ruined site which had yielded sculptures at the time of Dr. Bellew's excavations.

ruins of Gandhāra, not, of course, from any sentimental regard for archæological interest or the 'law,' ill-defined as it was on the subject, but simply in order to keep in reserve quarries of sculptures for their own use. The shallow pits observed on several of the unoccupied low mounds were sufficient proof that these quarries had been duly used by the owners when occasion arose for presents of 'idols' to 'Sahibs.'¹

It was among these low mounds, marking as it were the outer periphery of the site, that Dr. Spooner's systematic excavations, at the mound now marked *A*, in 1906-07 and at *B*, in 1909-10 had been rewarded by such abundant and interesting results. There were scientific as well as practical reasons making it advisable to direct further operations at the site in the first place towards the remaining mounds of this class. On the one hand it was reasonable to hope that since a larger number of them could be cleared within the available limits of time and means, the observations and 'finds' gathered would yield more conclusive evidence as to the character, chronology, etc., of the site as a whole. On the other it seemed very doubtful whether if one of the larger mounds of the 'inner ring' were attacked, the clearing possible within a single working season would suffice to lay bare structural remains of a truly instructive character, seeing that so many similar mounds in the plains of Gandhāra which are now being gradually exploited by villagers for the sake of manuring soil, prove to be composed only of layers of amorphous débris, the 'culture strata' left behind by a succession of private dwellings. An obvious practical difficulty was added by the presence of Muhammadan graves on several of the more promising mounds of this type.

In selecting the six mounds cleared this season I was guided largely by the fragments of sculpture in stone or stucco which a search among the scrub covering the surface generally revealed very soon. Nor was the reliance placed on these indications disappointed; for all the mounds proved to contain ruins of Buddhist places of worship. In addition to a great mass of interesting Gandhāra sculptures they have yielded up antiquarian and *quasi*-chronological data of importance for the history of the whole site. The documentary value of these data is greatly increased by the fact that the remains of these shrines with one exception disclose a striking number of common features. This uniformity of type deserves all the more attention because the ruins explored are not confined to a single portion of the site, but as the map shows, widely scattered over its whole area. Two of the newly excavated mounds marked *C*, *D*, are situated to the south and south-east, respectively, of Sahri-Bahlōl village, while the others (*E*, *F*, *G*, *H*) lie at different points to the north and north-west.

In this connection it may be recorded that besides the mounds actually excavated sculptural remains could be traced at the following lesser mounds; Salārai Korūna, on the left bank of Murdāra, marked 1031 in map, now occupied by a large dwelling and cattle-yard into the walls of which numerous fine sculptured pieces have been built; mounds marked 1089 and 1069, close to Salārai Korūna and evidently dug up previously; Damāmē hamlet; Sāduddīn Korūna, near the Swāt

¹ Comp. Dr. Spooner's remarks in *Arch. Annual*, 1906-07, p. 104, on a recent instance of such digging 'on order.'

EXCAVATIONS AT SAHRI-BAHLÖL

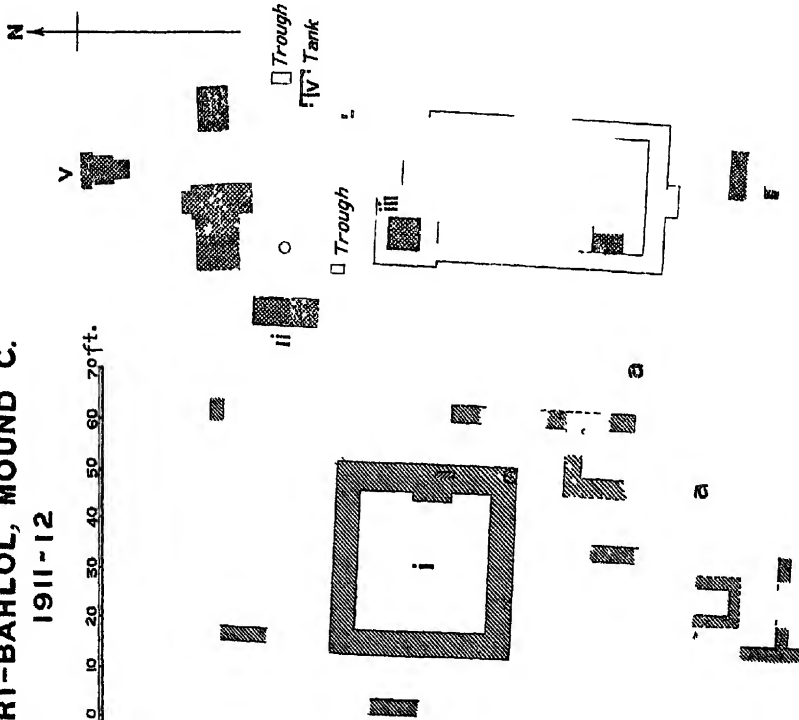
PLAN OF EXCAVATIONS

AT

SAHRI-BAHLÖL, MOUND C.

1911-12

0 10 20 30 40 50 60 70 ft.



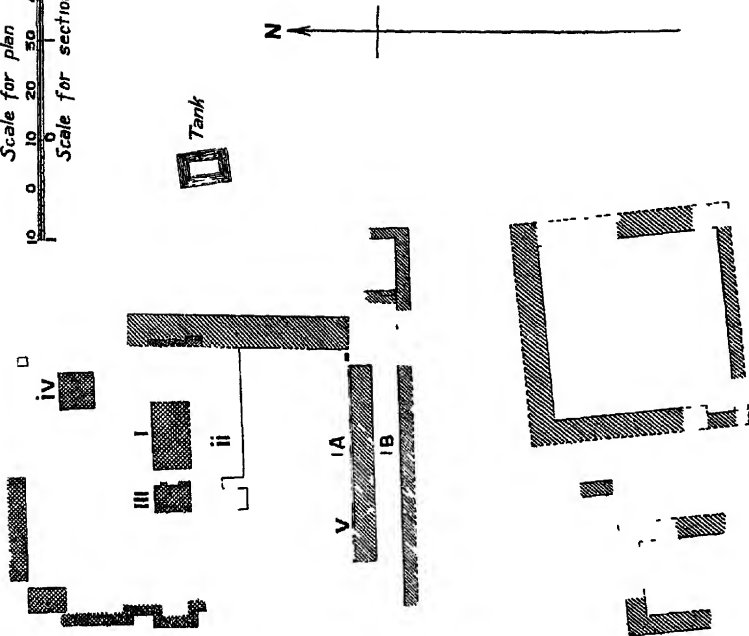
PLAN OF EXCAVATIONS

AT

SAHRI-BAHLÖL, MOUND D.

1911-12

0 10 20 30 40 50 ft.
Scale for plan
0 10 20 30 40 50 ft.
Scale for section



-SECTION ON A.B.-



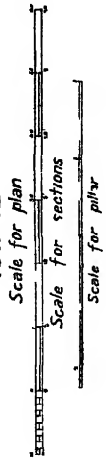
Wall of masonry
Stuccoed platform or base
Stone pavement

Wall of masonry
Stuccoed platform or base
Stone pavement

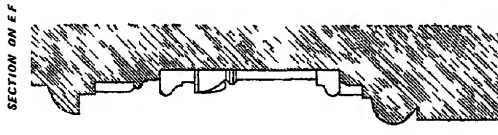
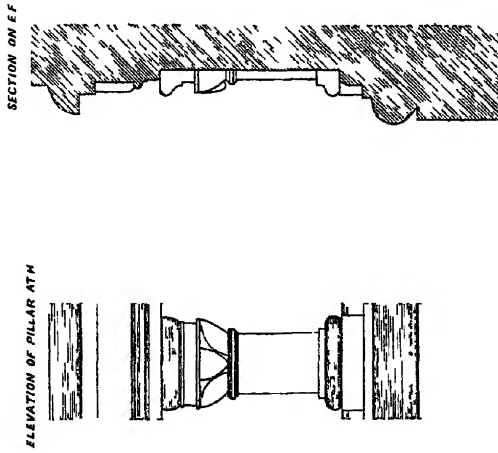
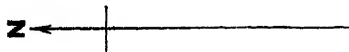
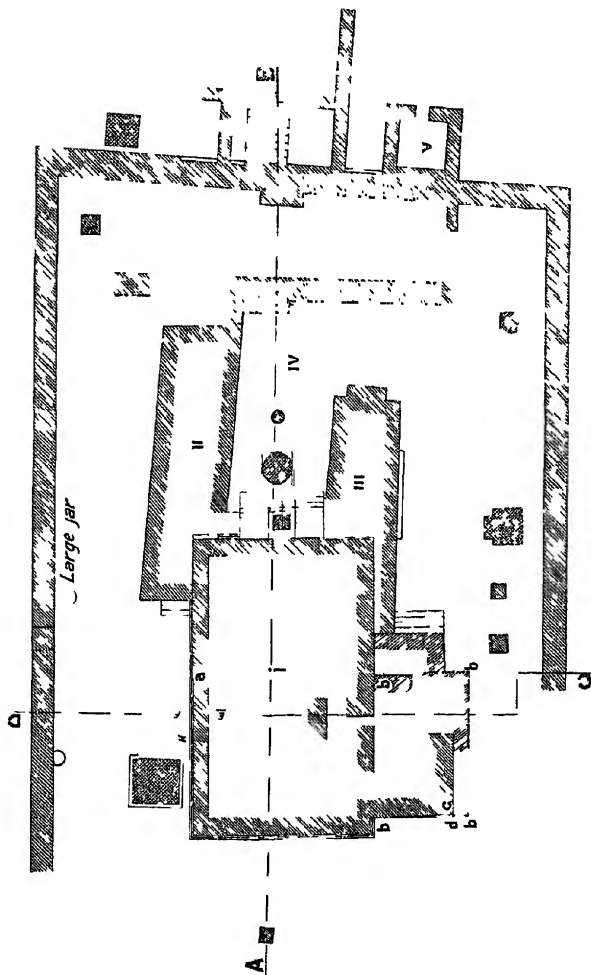


PLAN OF EXCAVATIONS

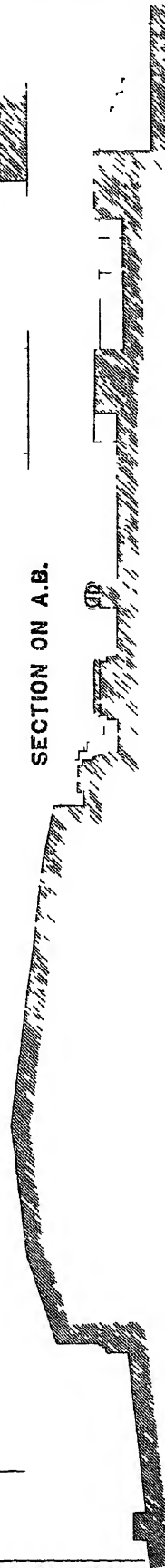
AT
SAHRI-BAHLOL, MOUND E
1911-12



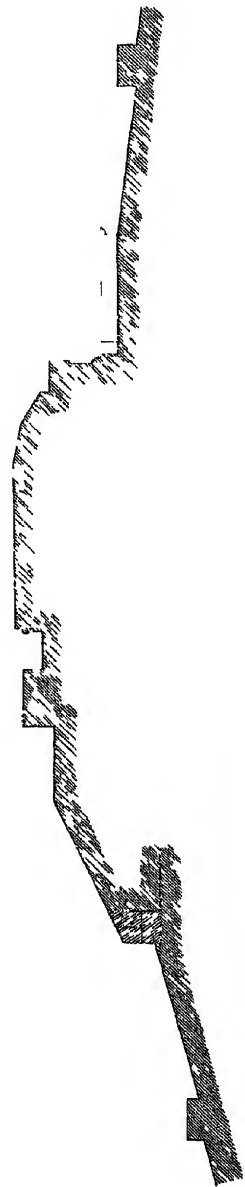
PLAN



SECTION ON A.B.



SECTION ON C.D.



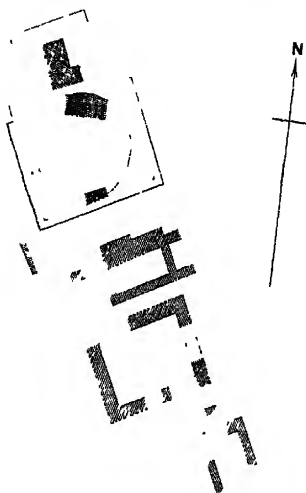
- Wall of masonry
- Stuccoed platform or base
- Later masonry
- Stone pavement

EXCAVATIONS AT SAHRI-BAHLÖL

PLATE XXXV.

PLAN OF EXCAVATIONS
AT
SAHRI-BAHLÖL, MOUND F.
1911-12

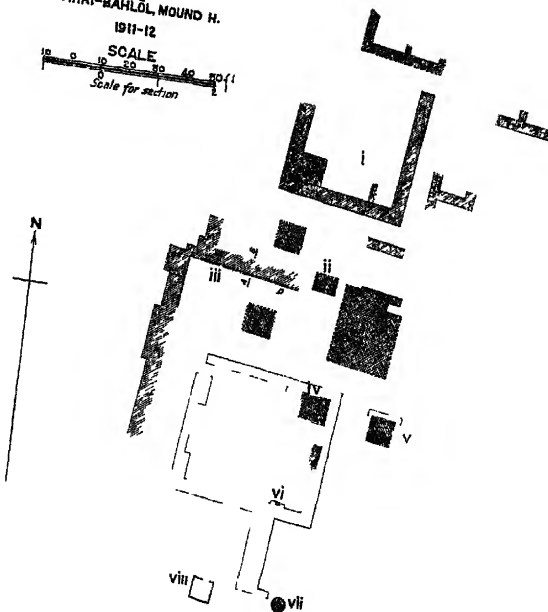
SCALE
0 10 20 30 40 50 60 ft



Wall of masonry
Stuccoed platform or base
Stone pavement

PLAN OF EXCAVATIONS
AT
SAHRI-BAHLÖL, MOUND H.
1911-12

SCALE
0 10 20 30 40 50 ft
Scale for section



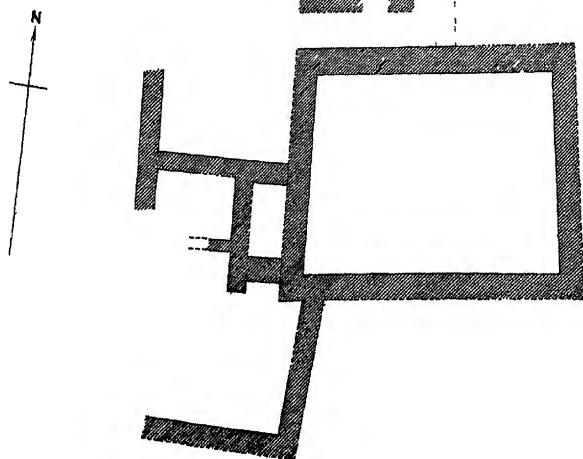
Wall of masonry
Stuccoed platform or base
Stone pavement

SECTION ON A B



PLAN OF EXCAVATIONS
AT
SAHRI-BAHLÖL, MOUND G.
1912

SCALE
0 10 20 30 40 ft



Wall of masonry
Stuccoed platform or base
Stone pavement

River Canal, and the mound close to the west of it, also showing marks of previous quarrying. Considering that these as well as the mounds so far excavated are all scattered at distances up to a mile or so from the central village mound, the question naturally arises as to the relation which existed between the ancient town represented by the latter and the shrines marked by the outlying mounds.

No definite answer seems possible until the period of continued occupation of the town site has been determined by actual excavations, as it has for those ruined shrines. But as these have invariably proved to have been adjoined by monastic quarters the suggestion naturally presents itself that the separation at some distance from the town and its suburbs was intentional and directly due to the original character of these shrines as places of monastic retirement. The way in which the principal Buddhist sanctuaries visited by the Chinese pilgrims in Gandhāra and Udyāna are usually described as situated at some distance from the towns maintaining them, would support this assumption. But the possibility must also be kept in view that the suburbs of the ancient town marked by Sahri-Bahlöl once extended considerably beyond the 'inner ring' of village mounds above referred to, and that the isolated position of those shrines was but the result of a gradual shrinkage of the urban area. Such an explanation would well agree with the fact that the mound (*E*) lying nearest to the centre of the site has proved to contain the remains of a shrine which continued in existence centuries longer than the rest.

The relatively early abandonment of almost all these shrines after a period of lingering decay which the excavations have demonstrated, is a matter deserving to be noticed here. Surprise has been expressed more than once at sites of such manifest importance as Sahri-Bahlöl and the conspicuous ruins on Takht-i-Bahī Hill, less than three miles north of it, not having found mention with even that most accurate and painstaking of Chinese pilgrims to Gandhāra, Hsuan-tsang. But since the progress of systematic excavation at both sites proves that the greatest portion of their shrines must have been abandoned and in ruins long before his visit in the second quarter of the seventh century, there is less reason than ever to consider his silence strange. As M. Foucher has most truly observed, Hsuan-tsang was not an archæologist but a pilgrim.¹ If the shrines of Sahri-Bahlöl and Takht-i-Bahī are not among the fifteen specifically mentioned by him out of the round thousand at which he estimates the number of convents in Gandhāra, 'mostly ruined and deserted' we can only conclude that worship at them had ceased, and that the sacred legends which originally may have attached to these foundations were not likely to have ever enjoyed celebrity reaching far beyond local limits. None of Hsuan-tsang's traceable routes in Gandhāra took the pilgrims past Sahri-Bahlöl, and we know how in true Chinese fashion he clung to his *ta-lo* or high road where no object of great religious merit was offering as the reward of a détour, or of a short cut.²

Before proceeding to record the results of the excavations carried out at each mound it appears convenient to indicate here briefly the characteristic features common to all or most of the ruined structures brought to light. At all the places

¹ Comp. Foucher, *Géographie Ancienne du Gandhāra*, p. 27.

² See Foucher *ibid.*, p. 6.

of Buddhist worship successively excavated remains of monastic quarters were found closely adjoining the ruined shrines of Vihāras which practically alone contained any sculptures. In the case of the dwellings the plan of at least the principal quarters could always be traced with ease by the massive foundations or plinths in solid Gandhāra masonry which must have once carried walls constructed of stamped clay or sun-dried bricks. One or two large quadrangular rooms seem always to have formed part of the monastic building, and evidently served for the common use of the monks. The latter's cells must have been constructed ordinarily with walls of very perishable material, mere clay or timber and wattle; no clear indication of them was found except at one ruin, *E*, which also otherwise showed structural peculiarities.

In striking contrast to the clearly traceable groundplan of the monastic portion of the buildings the walls which once must have sheltered the shrines with their small Stūpas and profusion of images have almost everywhere disappeared to their very foundations. Where masonry could be traced on the edge of the Vihāra area it proved to have served merely as a kind of retaining wall to carry friezes of stucco reliefs or as an extensive base for rows of sculptures in stone. Cumulative evidence points to such sanctuaries in the plains of Gandhāra having ordinarily been sheltered only by structures in timber, with wattle or thin brickwork added in the side walls. It is a system of construction which can still be studied with ease in many outwardly imposing looking native buildings of Peshawar City, and with which I have become familiar both in ancient ruins and modern structures of Chinese Turkestan.

It is to this nature of the superstructure, particularly liable to rapid decay, whether by natural causes or human agency, that I think we must explain on the one hand the scanty cover of earth or débris below which the sculptures were ordinarily found and on the other the utter confusion in which the latter turned up, whether intact or injured. Solid walls of clay or sun-dried bricks would when fallen have provided a far deeper layer of earth than usually covered the Vihāra areas. Sculptures lay here often quite close to the surface, whereas in the monastic portion the original floor level lay generally buried several feet deeper. Then again the quarrying of abandoned or destroyed shrines for their timber such as I could trace by conclusive evidence at Buddhist temple ruins situated on the edge of the Taklamakān Desert, seems to afford the best explanation for the strange way in which sculptures, evidently left unharmed by iconoclast hands, were yet found, displaced and thrown about, on levels well above the original flooring. Only in very rare instances were charred remains or other traces of the action of fire found within the Vihāra area.

Given these conditions of construction, the architectural remains brought to light were not likely by themselves to furnish definite clues as to the relative periods from which the shrines originally dated, or as regards the changes they subsequently experienced. Fortunately the sculptures in stone or stucco which, particularly at three of the sanctuaries, have survived in abundance, together with coin finds and inscribed pottery, throw a good deal of light on these questions. They make it quite clear that even if the period of original foundation may not have differed

EXCAVATIONS AT SAHRI-BAHLOL.



(Fig. 1.) NORTHERN PORTION OF VIHARA AREA, MOUND C, SEEN FROM S.E.



(Fig. 2.) GROUP OF IMAGES OF BUDDHA AND BODHISATTVA *in situ*, MOUND C, IV,
IN COURSE OF EXCAVATION.

greatly, the length of time during which the shrines continued 'in being' as places of actual worship, varied considerably. Both at shrines *C* and *D* statues and relievos manifestly belonging to an epoch when the skill and tradition of the best period of Gandhāra art were still alive, were found mingling with sculptures of a distinctly decadent type.

In full agreement with this observation, the coin finds at mound *C* comprise by the side of a remarkably fresh looking piece of Azes, coins of the type associated with Vāsudeva, the last of the Kushāṇa monarchs and others issued by the 'Later Indo-Scythian rulers' succeeding him. At the ruins, *E-H*, all to the north or north-west of Sahri-Bahlöl village, the sculptures throughout exhibit a decadent type and the coins confirm the later occupation. At shrine *E*, in fact, we have definite evidence that Hindu worship, after replacing the Buddhist cult, continued here down to the 10th Century A. D. This is proved not only by coins of the so-called Hindu Shāhis of Kābul but also by sculptural fragments unmistakably Hindu.

The great diversity in date and artistic merit among sculptural remains recovered from the same ruin has been noticed before at various sites of Gandhāra. But nowhere, perhaps, has the process of long continued decay and lingering worship which explain it, left such striking proofs as here. At almost all these ruins there survived some at least of the platforms, usually square and decorated in stucco, which had served as bases for Stūpas or individual small Vihāras, and with which these places of worship must have been studded. Now both at ruins *C* and *D* clear evidence showed that several of these platforms had been utilized, at a date long subsequent to their construction, as places of deposit for miscellaneous statues and relievos. In some cases these sculptures set up round the base were hiding a manifestly far older stucco frieze behind them, showing damage due to prolonged previous exposure.

It was equally significant that among the statues thus ranged and mostly of late appearance there were some which must have lost their pedestals or otherwise received injury long before being thus set up. Clearly those later worshippers who utilized these decayed Stūpa bases in a manner never intended by the original donors, must have collected here not merely such images as the artists of their own day could produce but also sculptural remains of earlier origin rescued from ruin at this or some neighbouring shrine. This explains why the imperfect statues thus discovered showed often a distinctly superior workmanship. Nor can the fragments of colossal images found repeatedly among these deposits be otherwise accounted for.

We are thus led to conclude that these shrines must have fallen into ruin probably more than once before they were finally abandoned. How much of the damage now observed in the majority of the sculptures is the result of *quasi*-natural causes or of wilful destruction it is impossible to determine. But it is clear that if the indications already mentioned can be relied upon, most of that damage had occurred long before the final Muhammadan conquest. We know of the vicissitudes which Gandhāra underwent in its history after the great Kushāṇa dynasty, serving as the gate and passage for successive invasions, and the process just indicated agrees well with what the Chinese pilgrims tell us of the condition of Buddhism in this region since the 5th Century A. D. Muhammadan iconoclasm is

certainly responsible for the final destruction of many a shrine where local worship was continued by Hindus; but this can be proved only of the ruin *E*, lying nearest to the central village. Here, too, a certain amount of quarrying of building materials, for use in modern structures, appears to have taken place. But judging from surface conditions and the testimony of old villagers none of the mounds cleared this season is likely to have suffered from those diggings for 'Buts' which have caused so much irretrievable loss at other old sites of the district.

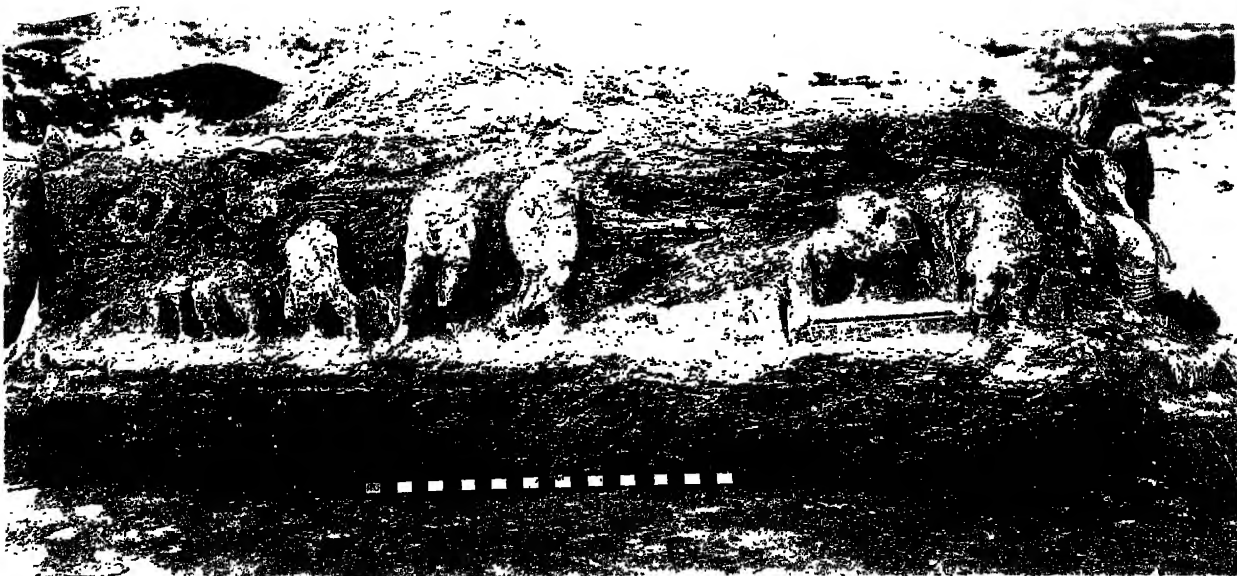
In the following description of the individual mounds and the remains they yielded I shall follow the order in which they were excavated and marked. Mound *C* situated about two-thirds of a mile to the south-south-west of Sahri-Bahlol village presented itself as a low mound covered with scrub and measuring circ. 260 feet from north to south and about 220 across where broadest. On its north-east edge the torso of a large Bodhisattva statue lay partially exposed, and smaller sculptured fragments could be picked up on the surface. Radiating trenches were started from the highest portion of the mound which rose about 8 feet above the level of the surrounding fields and proved to be situated a little to the south of the main monastic structure (see Pl. XXXIII). They showed very soon that the eastern portion of the mound contained the remains of the Vihāra while over the western one were scattered the wall foundations marking the position of the monastery.

The principal structure of the latter consisted of a hall (marked I) measuring inside 28 by 27 feet and enclosed by walls of which the foundations built in Gandhāra masonry showed a thickness of fully 5 feet. These foundations, struck at a depth of circ. 3 feet from the surface, reached down for about $2\frac{1}{2}$ feet and showed by their carefully levelled top that they had once carried walls of clay or sun-dried bricks. The discovery of a circular pillar base in stone at the south-east corner and some receding remains of masonry near the centre of the east face where the entrance undoubtedly lay, suggested that these walls may have been of lesser thickness than the foundation or plinth. The fact of a similar pillar base being found almost on the surface, but some 20 feet to the east of that wall face, plainly showed that the materials of the monastic quarters must have been utilized on some later occupation of the mound. A layer of reddish earth, evidently calcined, with traces of charred wood, which was found on a level slightly above the top of the foundations, clearly represented the remains of the roofing which had been destroyed by fire. Near the north side of the hall and on a level about one foot above the foundations was found a much corroded bronze coin of the Later Kushāṇa type.

That this structure was not the earliest to occupy this position was proved by the discovery of a wall foundation of very solid construction in stone running parallel to its west wall but on a level about 2 feet lower. This, however, broke off with a length of only 9 feet and had probably been dug up to furnish materials for some later structure. Other detached fragments of wall foundations, also in Gandhāra masonry, but of less solid construction, came to light, as the plan shows, both to the north and the south of the hall and on approximately the same level. But except for two small cellars traceable to the south the structural relation of these detached wall portions could not be made out. That they must have belonged to the living quarters of the small convent was made certain by the quantity of ancient potsherds,



(Fig. 3.) BASE III. MOUND C, AFTER EXCAVATION, SEEN FROM S.W.



(Fig. 4.) BASE III. MOUND C, AFTER EXCAVATION, SEEN FROM SOUTH.

some of them inscribed in inked Kharoshthi characters, which were found in the area immediately to the east and south-east of them (marked *a* in plan).

The whole of that portion of the mound which lay to the east of these structural remains and extended also considerably to the north-east of them was proved to have comprised the Vihāra area. Taking the measurements from the extreme points where sculptures were found evidently *in situ*, this extended fully 160 feet from north to south and over 80 feet from east to west. The height of earth covering the original floor level varied here from two to about five feet. Nowhere was it possible to discover traces of the superstructures which once are likely to have sheltered at least part of the wealth of small shrines and sculptures crowded into this space. Some of the latter may have been disposed of in open courts. But that the principal shrine with its mass of images, once, no doubt, gilt or painted; its miniature Stūpas in stone and stucco; its *ex-votos* in perishable material, such as painted flags and panels, etc., could have been left completely exposed to the inclemencies of a climate then certainly moister than now, appears to me very improbable. Galleries or halls constructed in timber would have best answered here the needs as regards space, economy of cost and adequate lighting, and on the assumption of this material the total absence of traces of superstructures would present nothing strange.

Fortunately in the case of the principal shrine situated opposite to hall I, but a little further south, the survival of a stone-lined passage all round, raised about 6 inches from the ground, indicated the original dimensions, an oblong of circ. 60 by 30 feet including the outer pavement. It is over this area and in its immediate vicinity that the greatest and best portion of the sculptures was brought to light. With the exception presently to be mentioned, they were found in such utter confusion as to suggest repeated quarrying apart from occasional destruction. Of the bases and platforms which must be supposed to have originally carried the majority of the statues and reliefs, no definite traces survived here, except at the north-western corner. There a small Stūpa base (marked III), about 6 feet square and decorated with a stucco frieze, was preserved to a height of a little over two feet by having been utilized at a later period for deposits of miscellaneous sculptures in the manner indicated above (see p. 101; Pl. XXXVI, XXXVII). A manifestly later pavement proved that this little sanctuary must still have been frequented at a period when the rest of the shrines lay already in ruins.

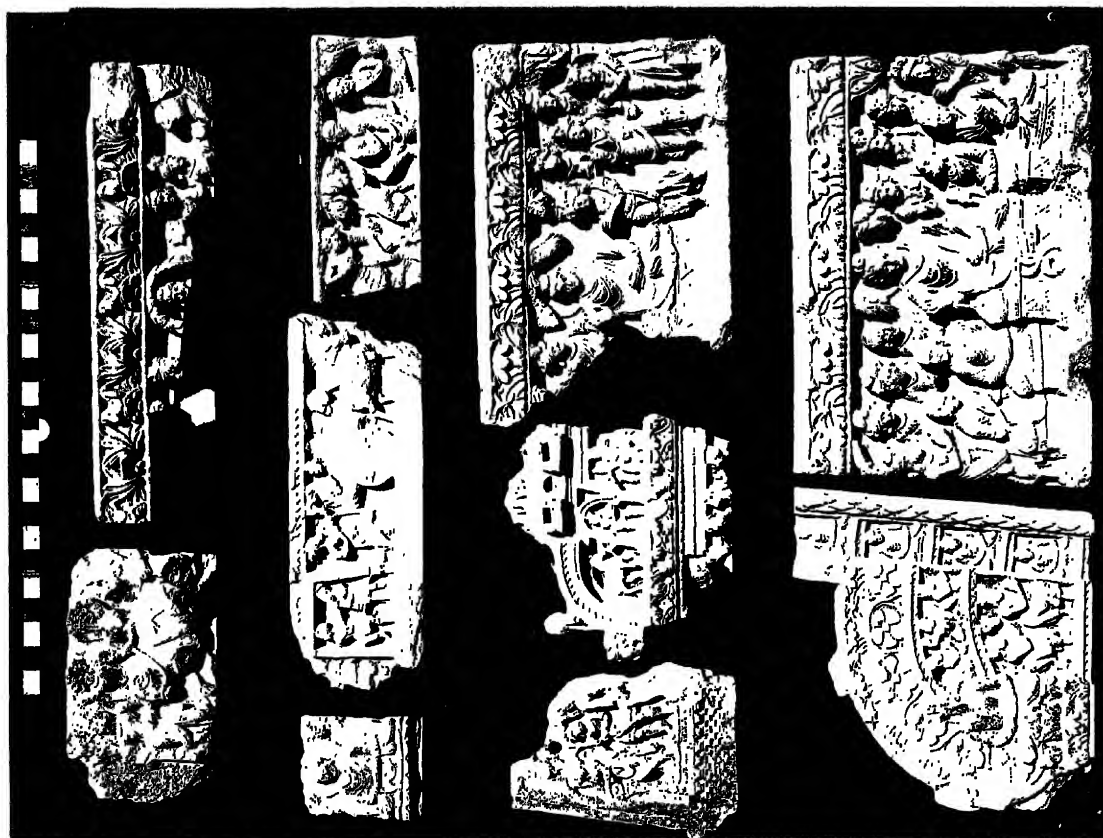
Four more detached platforms, mostly oblong, were discovered to the north. Even the best preserved among them (marked II) did not rise more than 2 feet 9 inches above the ground in its present condition, and the rest less than 2 feet. But the quantity of the sculptural fragments in stucco, mainly heads, often retaining traces of colouring, which were found near them, proved that they once carried higher friezes decorated with reliefs in stucco. The platform marked II, measuring circ. 12 by 5 feet, showed in its extant portion a frieze of simple pilasters originally stuccoed; another, V, with a more elaborate ground plan, still retained a projecting row of crouching lions above the lowest base. Whether these platforms had once carried small Stūpas or miniature Vihāras could not be decided. Two more small structures of this kind were traced to the south of the central area, but only in broken foundations.

A number of statues of Buddhas and Bodhisattvas were found in different places between these various platforms and the central Vihāra in position of small groups which left little doubt as to their being still more or less *in situ*. Thus two sitting figures representing a Buddha, the other a Maitreya Bodhisattva were discovered still upright close together near the south-west angle of what had been evidently a small tank (marked IV). The north bank, 8 feet long, which alone remained intact, showed a depth of three feet and a carefully stuccoed surface extending also over part of the bottom. Some fragments of pottery inscribed with Kharoshthi characters turned up in the vicinity of this tank the character of which was subsequently made quite certain by the far better preserved tanks discovered at mounds *D* and *II*. Immediately to the north of the tank we found a rough trough over 4 feet long formed of large imperfectly hewn slabs and still showing a plastered interior. Another trough of this kind was laid bare not far from platform III. That water must have been kept handy, perhaps for ritual purposes, near such shrines was shown also by a number of badly broken big jars of which several were uncarthed in the space between platform II and tank IV.

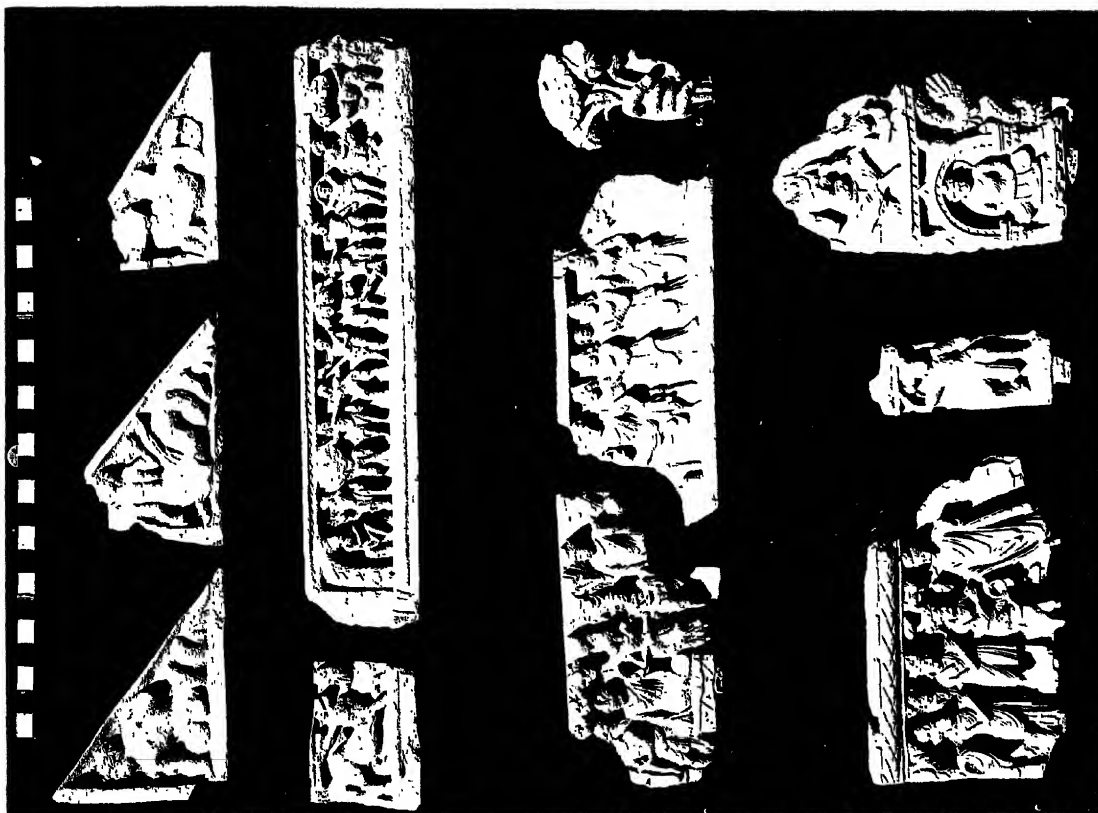
Here, too, at a distance of about 13 feet to the east of II, the head of a colossal figure in stucco was discovered on the original ground level. As the head measured 1 foot 8 inches in height from the chin to the top of the forehead the image must have been more than double lifesize. Of the rest of the statue no clearly recognizable remains could be traced in spite of close search, evidence that it had consisted of mere friable clay, supported probably by an inner framework of wood, such as I had found in all similar sculptures from Khotan to Tun-huang.

The wealth of sculptural remains recovered from the Vihāra area of this mound is best indicated by the fact that the inventory photographs taken on the spot which necessarily show them in larger or smaller groups, include close on 600 pieces. That a considerable proportion of them are mere fragments is an obvious result of the vicissitudes experienced by the site but does not detract from the interest of individual 'finds' among them. To the pieces thus reproduced were to be added many repetitions of architectural ornaments or fragments too poorly preserved. Other tasks of an urgent nature have left me no time for the systematic arrangement and study of these sculptures either during the excavations or since, nor has it been even possible so far to unpack them at the Peshawar Museum. These facts will, I hope, sufficiently explain why the present paper cannot aim at any detailed analysis of these finds or even of their main classes but merely at brief notes and illustrations concerning sculptures of special interest.

My friend, M. Foucher, the leading authority on the art of Gandhāra, has been kind enough to look through the majority of the inventory photographs and to communicate to me succinct but illuminating notes about points which struck him at first sight as of iconographic interest. In all cases where M. Foucher's unequalled familiarity with Græco-Buddhist art has either supplied me with the right interpretation of a sculpture or else confirmed the view I had myself formed of it, I have added his name to my note. For the very valuable help which he has thus given me and which has saved me much time over search and verification, I wish to record here my cordial thanks. The above explanation applies equally to the remarks I shall



(Fig. 5.) RELIEVO FRAGMENTS WITH LEGENDARY SCENES,
MOUND C.



(Fig. 6.) RELIEVO FRAGMENTS,
DECORATIVE OR WITH LEGENDARY SCENES, MOUND C.

have to offer on the sculptural remains at the other mounds. In order to facilitate specialist study thereafter references have been given to photographs not reproduced here but enumerated in the List appended to my Annual Report, such photographs being kept available for inspection both at the office of the Director General of Archæology at Simla and at the India Office.

Relievo panels whether originally belonging to the bases of small Stūpas, etc., or intended for detached deposition, are largely represented. Among them compositions illustrating Buddhist legends are of special interest. It is natural that scenes connected with the most popular episode in the life of Buddha should prevail. Thus we have the horoscope cast by Asita and the 'great departure' from the palace of Kapilavastu in an excellently carved frieze (photograph No. 326; Foucher); the offering of the bowl of dust (No. 329; Foucher); the scene of Adhyeshana (No. 325; Foucher) Pl. XXXVIII, Fig. 5, the attack of Māra's host (No. 334). The 'great miracle of Śrāvastī', that important scene in the life of the enlightened, the true recognition of which in Buddhist iconography is one of M. Foucher's many brilliant discoveries,¹ is largely represented and in several interesting varieties (Nos. 319, Foucher; 316, Pl. XLVII, Fig. 29; 317; 318; 322; 324).

Of scenes belonging to previous births we have the Dipankara Jātaka (No. 315; Foucher) and, perhaps, the Vessantara Jātaka (No. 325, Pl. XXXVIII, Fig. 5). Special attention is due to a well-preserved panel (No. 421; enlarged No. 325). In this M. Foucher recognizes a novel version of the story of the Nāga Elāpatra,² who presents himself here before the Blessed One as a many-headed serpent, a motif altogether exceptional in the art of Gandhāra 9 (see Fig. 5, Pl. XXXVIII). Another scene of particular interest is seen in a relievo of No. 325 which represents the young Bodhisattava Gautama riding on a ram (Fig. 5, Pl. XXXVIII). M. Foucher points out that this is the exact counterpart of the hitherto unique³ representation found in the sculpture discovered by Dr. Spooner at Sahri-Bahlöl Mound A and reproduced in Pl. XXXI a, of the *Arch. Rep.*, 1906-07. Its juxtaposition there with the writing lesson of the young Bodhisattva leaves no doubt as to this curious ride being meant to represent part of the physical exercises which the legend records of the prince's early youth. Another relievo in the same photograph No. 325, Pl. XXXVIII, Fig. 5, with two men feeding from a large bowl and a doglike animal sitting by, suggests some Jātaka story which still remains to be identified. Two or three other small scenes on relievos in Nos. 327, Pl. XXXIX, Fig. 7 and 329, seem to await identification.

Among the relievos and statues showing single figures the vast majority consists of Buddhas and Bodhisattvas. They differ as greatly in size as in artistic merit. Of colossal images, whether in stone or stucco, only the heads have survived. A very beautiful specimen in stone, about 20 inches in height, is reproduced in No. 300, Pl. XLII, Fig. 19, showing a close approach in features to the Hellenistic Apollo type.

¹ See his article *Le 'Grand Miracle' du Buddha à Śrāvastī* in *Journal Asiat.*, Janvier Février, 1909.

² Comp. for the hitherto unique Gandhāra representation of the Nāga Elāpatra, in human form, Foucher, *L'art du Gandhāra*, I, pp. 502 sq.

³ Several reliefs depicting the Bodhisattva riding on a ram are also found in the Lahore Museum. Cf. J. M. No. 125 (Ed).

That Bodhisattva figures are far more numerous than Buddhas cannot surprise, nor the considerable variety which their ornaments and headdresses present. That the latter in particular are intended to serve as an emblematic distinction for different divinities familiar to the Mahāyāna system is highly probable. But the clues so far obtained by iconographic research do not appear sufficiently certain to justify here any attempt at classification. After the appearance of M. Foucher's second volume the task of the non-specialist student will, no doubt, be greatly facilitated. For the present I must content myself with mentioning that the high headdress with a pyramidal ornament in front, which Dr. Spooner is inclined to attribute to Avalokiteśvara,¹ is frequent; see in particular the excellently carved and perfectly preserved relief in No. 288,² Pl. XL, Fig. 12, and also Nos. 289, 291, Pl. XL, Fig. 11, 295, 302, 312. The less elaborate coiffure showing the hair bound by strings of pearls and gathered in a loop, which Dr. Spooner is inclined to attribute to Maitreya, is well represented in Nos. 290, Pl. XL, Fig. 9, 293. Attention may also be called to the representation of a small seated Buddha figure, probably meant for a Dhyani-Buddha in front of the headdress of one of the two Bodhisattvas seen in No. 305. Among the Buddha figures the one of No. 292 may be singled out for mention on account of its superior modelling and excellent preservation. Pl. XLI, Fig. 15.

The number of detached statues and reliefs at this site is so large that some significance may be attached to the proportion of uninjured or practically intact images being far greater among the seated than among the standing ones. From natural causes of damage the former were, no doubt, far better protected than the latter, whereas wilful damage would not make such distinction. The frequency with which the donors are represented in the reliefs usually occupying the face of the image base, adds human interest to these sculptures. The most common device shows them in pairs worshipping before an incense-burning altar (*e.g.*, in Nos. 295, 304, 310, 312); but we find them also in attitudes of worship on either side of a small Buddha image (Nos. 290, 293, 304, 308, 311) and occasionally forming regular family groups as in No. 293 where the sacred begging bowl is the object of worship. In the base panel of the fine Bodhisattva image No. 283 already mentioned the artist has endeavoured to introduce a more individual touch; for here we see on one side of the incense-burning altar besides the donor two smaller figures, probably meant for his sons, while on the other side a youth in working attire reduced to a loin cloth drives a plough with two oxen. Pl. XL, Fig. 12.

Special interest attaches to two statues which unmistakably are intended to represent pious donors. The male one, (No. 302), nearly life-size and of excellent execution but badly injured, shows a realistically modelled portrait head and curious details of costume, including striped trousers tucked into top boots; the left hand

¹ See *Archaeological Report*, 1906-07, p. 116

² Mr. Hargreaves directs attention to two uncommon features of this relief (Plate XL, Fig. 12), namely, the ploughing scene on the right of the pedestal and the foliage on the halo and suggests that the Bodhisattva is not Avalokiteśvara but Gautama himself, and would designate the relief "The first meditation of the Bodhisattva." The straining oxen, the exhausted labourer and the overshadowing *jambu* tree indicate the locale, the position of the hands that state of unconscious ecstasy (*dhyāna*), which resulted from the love and pity induced by his reflections. Cf. *Sikri Stūpa*, 10, in the Lahore Museum, and Cowell, *The Buddhakarita of Asvaghosha*, Oxford, 1914, Book V, p. 49 ff. (Ed.)

EXCAVATIONS AT SAHRI-BAHLOL.



(Fig. 9.) BODHISATTVA STATUE, MOUND C.



(Fig. 10.) BODHISATTVA STATUE, MOUND H,
REPLACED IN ORIGINAL SOCKET.



(Fig. 11.) BODHISATTVA STATUE, MOUND C.



(Fig. 12.) BODHISATTVA STATUE, MOUND C.

holds the base of what may have been a miniature Stūpa or shrine. The other figure (No. 298) representing a female, with some indistinct object in her hands, suggests by its poor execution a much later date. (Pl. XLI, Fig. 13). Here too the dress and hair present points of interest. Along with these may be mentioned a curious statue (No. 299) about two and a half feet high showing a figure with a striking elderly face unmistakeably modelled from life and in distinctly realistic fashion (Fig. 14, Pl. XLI). The right arm is broken, while a fruit is held in the left hand. The dress and expression of the face would suggest a monk; but there is a moustache and the hair is short-cropped, not shaven.

But from the iconographic point of view, perhaps, the most interesting of all these images is that of a four-armed female divinity, carved in high relief and about four feet high (No. 297, Fig. 16, Pl. XLI). Its preservation is perfect. Its right and left upper arms carry a bell and the trident, respectively, while in the lower pair are held the figure of a small child and a Lota-shaped bowl. From the corners of the mouth project small tuskers. Arms, neck and hair are decked with rich ornaments. Behind the scarf-like garment which descends from the head there appears a halo. At the feet are seen two worshipping small figures. There can be no doubt that M. Foucher is right in recognizing in this strangely discordant image a representation of Hārītī, the goddess of small-pox, in her original form as a Yakṣiṇī or ogress.¹ Misled by the trident and what had looked like flames issuing from the mouth but in reality are meant to be tuskers, I had first taken the goddess for a form of Pārvatī. But this representation of Hārītī in a fashion strongly reminiscent of Hindu imagery is all the more curious because, however inferior the execution is to that of the average of the sculptures here found, its style is still distinctly that of Gandhāra work. We have here a fresh proof that the evolution of the many-armed monstrosities known to later Buddhist worship in India and the northern border lands had commenced already in the old home of the Mahāyāna system. Perhaps, the fact that the 'mother of demons' is likely to have received worship also among the non-Buddhist population of Gandhāra may help to explain the adoption for her of a form so consonant with Hindu iconographic notions. It is of interest to note that the image was found in the extreme north of the Vihāra area and some 6 yards to the west of base V. The position is one where we may well assume an entrance gate to have stood. And this would well agree with what I-tsing records of an image of Hārītī being always found at the porch or in a corner of Buddhist convents in India.

Reference has been made already above to the rich decoration in stucco reliefs which the small bases and platforms must have once carried. The remnants of the lowest frieze which have survived of this stucco decoration in the case of base III (see Nos. 277, 278) show that it comprised not merely detached figures but also regular scenes similar to those we find represented in the relief panels of stone. (Pl. XXXVII). But elsewhere we can trace the richness of this decoration only by the abundance of fine heads in stucco generally of small size which have escaped destruction (Nos. 340-345, 350-356). The excellent modelling and great variety of type which most of those heads display, are both striking and may warn us against

¹ Comp. for the character of Hārītī, the 'mother of demons', Foucher, *Anc. géographie du Gandhāra*, pp. 21 sq.

giving way to the notion which would necessarily relegate the abundant use of stucco to a later period. At the same time certain technical features, such as the often very elaborate and boldly modelled headdress, make it appear very improbable that these heads could have been mechanically reproduced from old moulds. The details, often distinctly classical, which these headdresses and wreaths display (see *e.g.*, Nos. 341, 345, 350, 354), would deserve special study. Larger fragments, such as the trefoil-arched niches and ornamental bands reproduced in Nos. 346-348, Pl. XLVIII, Fig. 32, give some indication of the part which stucco had played in architectural decoration here too as at most Gandhāra shrines.

Among the sculptural remains the decorative elements familiar to Gandhāra art are so largely represented that I may content myself with mentioning only those which may claim some special interest. Of the decorative 'personnel' for which direct classical origin must be claimed, we have besides various Tritons or Ichthyocentaurs, to give them their more exact designation (Nos. 328, 329), also a Titan with a single snake's tail and a dragon-like monster. Far rarer, as M. Foucher points out, is in Gandhāra the representation of the Centaur, with shield and javelin or mace, such as panel No. 329 displays. (Pl. XXXVIII, Fig. 6.) The motif of the garland-carrying *amorini* recurs twice (Nos. 337, 345); but more curious, perhaps, is the appearance of female busts within pendant semilunes formed of rich foliage (No. 335), a variant, it seems for the winged figures which so often are shown rising from the loops of such garlands.¹ Among floral motifs some fine specimens of the Assyrian honey-suckle or palmette (Nos. 335, 337, 344) may receive passing notice as reproducing a decorative element which Gandhāra shares with classical art not as a loan but probably as a common inheritance from Western Asia.²

Among the miscellaneous finds at this mound the half-a-dozen earthenware lamps, also one in stone, showed shapes closely resembling the modern *chirāgh*. Some small terracotta figurines with grotesque representations of the human figure and the much-eroded remains of some bronze ornaments, including a buckle with an S shaped clasp, and a small bell-shaped object, were too poorly preserved to furnish antiquarian indications of value. A thick iron nail about 3 inches long, found within the central Vihāra area, had, no doubt, served like similar ones discovered still *in situ* at different points of the Takht-i-Bahī Court T. XIV. ii cleared this year for fixing some relieve panel to its backing.

Of far greater interest are the coin finds, comprising five legible pieces which furnish valuable chronological evidence. Of these the best preserved one is a coin of Azes, of base metal intended for silver corresponding in type almost exactly to No. 18 of Prof. P. Gardner's *Catalogue of Greek and Scythic kings of Bactria and India in the British Museum*, except for a slight variation of the mint mark on the Obverse. It shows very little wear and was found on the floor level within the central Vihāra area and near its southern edge. Of the remaining pieces one was found about one foot above the top of the north foundation wall of the hall I and the rest not much above the ground level to the west of the southernmost portion of the central Vihāra area. All these coins are of bronze and were so thickly covered with

¹ Comp. Foucher, *L'art du Gandhāra*, i. p. 270, with Figs. 116-118.

² See Foucher, *ibid.*, p. 222.



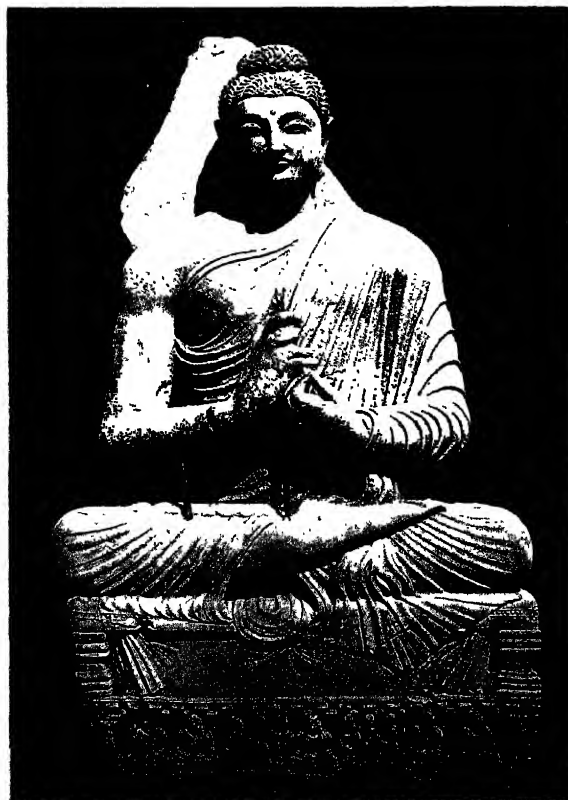
(Fig. 13.)

STATUETTE OF DONATRIX (?), MOUND C.



(Fig. 14.)

MALE STATUE OF DONOR (?), MOUND C.



(Fig. 15.)

BUDDHA STATUE, MOUND C.



(Fig. 16.)

STATUE OF HARITI, MOUND C.



(Fig. 17) STUCCO HEADS AND CHIRAGHS
IN POTTERY AND STONE, MOUND C



(Fig. 18) CINERARY URNS IN POTTERY, MOUND D.



(Fig. 19) COLOSSAL BUDDHA HEAD IN STONE,
MOUND C.



(Fig. 20) BUDDHA IMAGE IN STUCCO,
PROBABLY FROM NICHE, MOUND D

verdegris at the time of discovery as to be unrecognizable. By an unfortunate chance the small envelopes in which they were placed at the time and on which the exact find places were recorded, were lost on occasion of the successful robbery to which my whole camp was subjected by expert local thieves. It is thus impossible to indicate more accurately the position of each of these four pieces. Luckily the value of the numismatic evidence they afford, is not materially impaired by this doubt.

All these coins have suffered much by wear and corrosion, and on none can the legends be made out any longer. But the types are all the same recognizable. One coin shows unmistakeably the type of the bronze coins of Vāsudeva (Bazedeo), the last of the Great Kushāṇa emperors, with the king standing before an altar on the Obv., and Śiva, with the bull behind him on the Rev. The king of the same type appears on the Obv. of the second coin of which the Rev. is completely effaced. The same is the case with the third coin where the Obv. distinctly recalls the characteristic royal figure of the Little Kushāṇa coinage. Finally there is a thin and broken piece bearing what looks a barbarous imitation of the seated goddess ($\Lambda\text{P}\Delta\text{O}\text{X}\rho\text{O}$) so common on the Rev. of a large class of the Later Great Kushāṇa coins.¹

Considering that the coins of Vāsudeva and of the Later Great Kushāṇas continuing his type can safely be assumed to have constituted the currency of Gandhāra during the long and rather obscure period extending from about the 2nd century A.D. to the settlement of the Little Kushāṇas under Ki-to-lo or Kidāra, circ. 425 A.D., it appears to me reasonable to conclude from the above coin finds that the time when the shrine was most frequented fell within that period. If I am right in attributing the third bronze piece to the Little Kushāṇas the shrine must have been still attracting worshippers down to the middle of the fifth century when the Ephthalites or White Huns after destructive inroads established their power on the North-West Frontier.

The total absence of White Hun coins from this and the other ruins suggests that during their rule which continued for about a century, the site was completely deserted. This would agree well with what the popular tradition preserved by Hsüan-tsang, related of the destruction of Buddhist shrines throughout Gandhāra² under Mihirakula, the White Hun ruler of these regions early in the sixth century. In this connection attention may also be called to the parallel evidence supplied for the Takht-i-Bahī ruins by three Later Great Kushāṇa coins which I discovered last March, while clearing the cella T. XXIII. i, in a position clearly suggesting a votive offering. They plainly suggest that the abandonment of that neighbouring great site also took place about the same period, an assumption which again would account for the fact that both at Takht-i-Bahī and at Sahri-Bahlöl the sculptural remains represent the same stages of style.

I have left it to the last to mention the epigraphic relics of mound C. because their evidence can at present be utilized only in regard to the chronological question. They consist of a considerable quantity of potsherds bearing Kharoshthī characters in ink, which turned up chiefly in the space extending from the south-west corner of the central Vihāra area to the west and south of the nearest remains of monastic

¹ Comp. for general notes on these coin types and their chronology, Rapson, *Indian Coins*, pp. 18 sqq.

² Comp. Julien, *Mémoires sur les contrées occid.*, i. pp. 191, 196; Watters, *Yüan-chwang*, i. pp. 288 sq. Stein, *White Huns on the N.-W. Frontier, Ind. Ant.* xxxiv, p. 81.

quarters. Occasional finds of such potsherds were made also in the space north of that area, especially near the tank IV. Many of the fragments are quite small, and a careful endeavour to fit them together will have to precede any attempt at decipherment. As, however, there are individual pieces containing up to eighteen characters there is hope of a satisfactory reading of at least a portion of these short inscriptions after they have been studied by a competent expert. I myself have been able to spare time merely for an examination of the palæographic character of the writing which conforms very closely to the type represented by the Kushana inscriptions and the wooden documents of the 3rd century A. D. excavated by me at Niya and other ancient Turkestan sites. The use of Kharoshthi writing on Indian soil cannot be proved at present to have descended much below the 3rd century A. D.¹ and as at C no trace of any other writing has been found it is clear that on epigraphical grounds, too, it would be difficult to admit a later occupation for the shrine and its convent than that indicated by the numismatic evidence already discussed.

Mound D which was the next to be excavated, was situated about eleven hundred and fifty yards to the south-east of Mound C and just one mile to the south-south-east of Sahri-Bahlol village. On its north side, at a distance of circ. 200 yards, it is passed by the deeply cut bed of the Murdāra stream. In its size and surface appearance it closely resembled Mound C, measuring circ 260 feet from north to south and rising to a maximum elevation of about 7 feet above the field level. Low scrub uniformly covered the surface; but small fragments of sculpture on the north and abundant pottery débris on the south at the outset suggested the relative position of the Vihāra and monastic areas. The position of the former was indicated still more plainly by some shallow pits dug for sculptures on that side.

Radiating trenches were started from the highest point of the mound which proved to lie almost in the centre of the ruins and in the line of the wall dividing the shrine from the monastic quarters (Pl XXXIII). The latter could be traced in the shape of masonry foundations of varying thickness and height, which once had carried walls of sundried bricks or clay. The principal part of these buildings was a hall measuring inside 35 by 36 feet. To the north-west of this there were indications of smaller structures built merely of clay; but the remains of their walls could not be distinguished with sufficient cleanness from the adjoining soil to permit of exact outlines being shown in the plan. The monastic area was divided from the shrine northward by a wall running due east-west of which the foundations in solid Gandhāra masonry, $4\frac{1}{2}$ feet thick and $2\frac{1}{2}$ feet high, were traceable for a distance of close on 80 feet. To the north of this wall, over a space measuring approximately one hundred feet square there were found the remains of a Vihāra comprising a number of ruined platforms and bases as well as scattered sculptures in plenty (Pl. XLIII, Fig. 21). The general conditions of these remains showed close resemblance to those observed at ruin C.

The finds of sculptures were most abundant on or near a central dais with a stone-lined edge, measuring circ. 34 by 18 feet and about 6 inches high. On its northern edge there rose still two small platforms (I, III) built of rough masonry

¹ Comp. Buhler, *Ind. Palæographie*, p. 19.

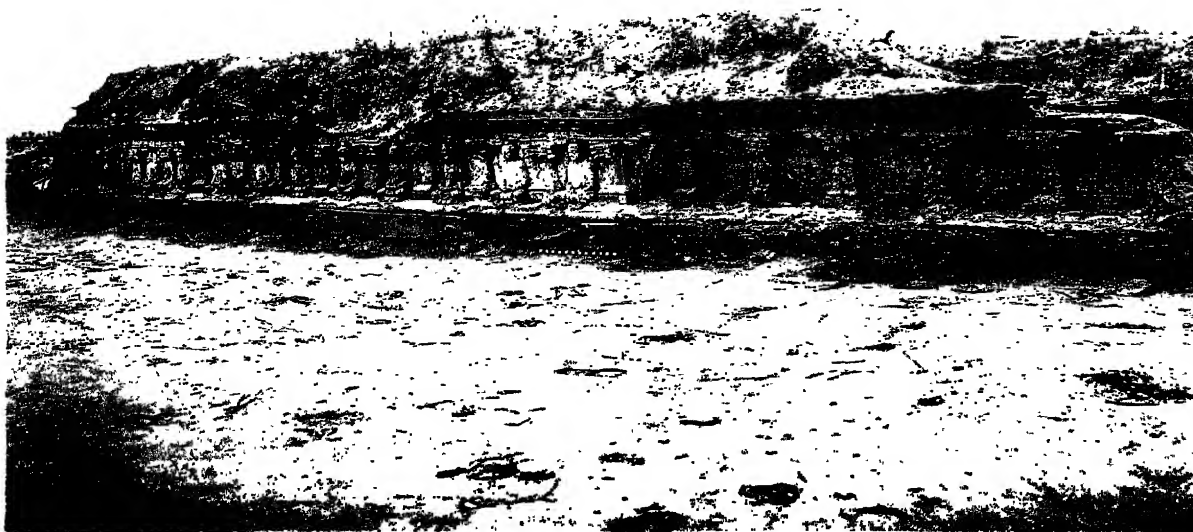
EXCAVATIONS AT SAHRI-BAHLOL.



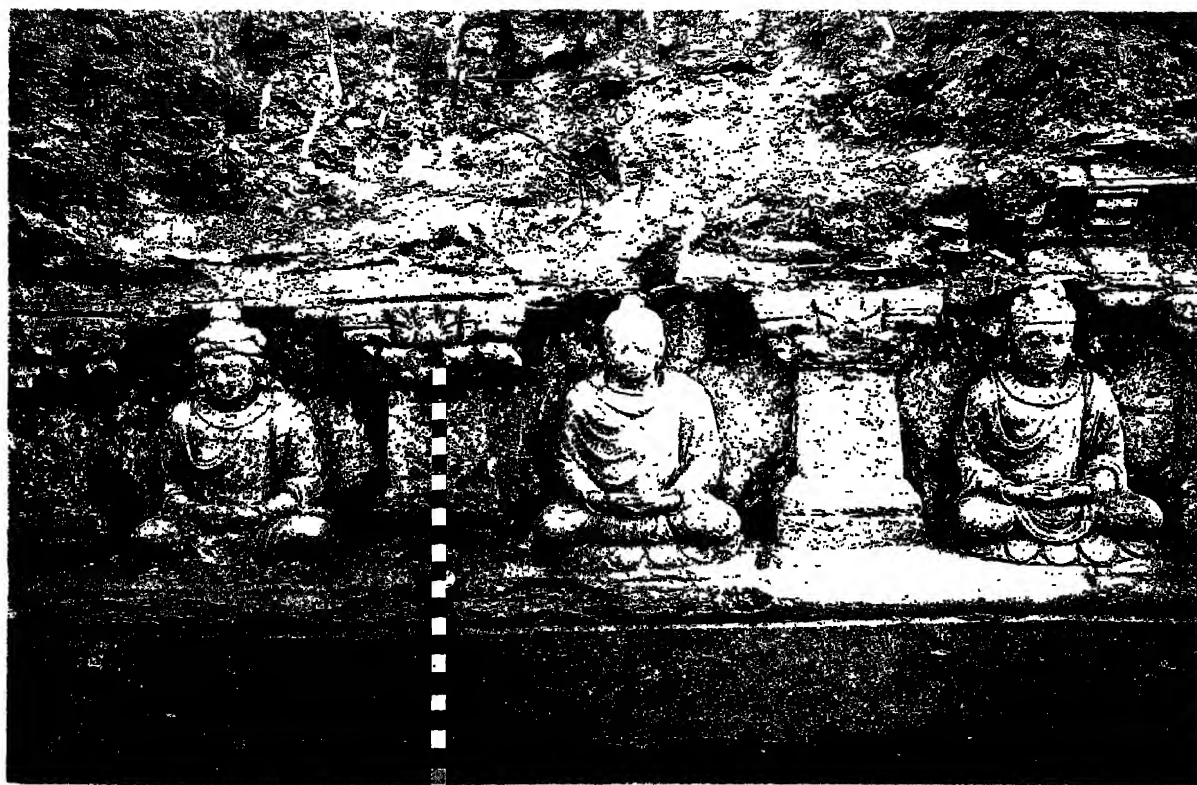
(Fig. 21.) PANORAMIC VIEW, FROM S.W. OF VIHARA AREA, MOUND D, AFTER EXCAVATION.



(Fig. 22.) PANORAMIC VIEW, FROM SOUTH OF VIHARA AREA, MOUND H, AFTER EXCAVATION. TAKHT-I-BAHI HILL IN BACKGROUND.



(Fig. 23.) NORTH FACE OF PLATFORM V, MOUND D.



(Fig. 24.) PORTION OF STUCCO FRIEZE ON NORTH FACE, PLATFORM V, MOUND D.

and stuccoed outside, which probably were meant originally as Stūpa bases but utilized at a later period as places of deposit for miscellaneous sculptures and fragments (Pl. XLVI, Fig. 27). Badly decayed remains of a third platform could be traced on the east side of the dais where this touched and partly overlaid a raised pavement circ. $6\frac{1}{2}$ feet broad and formed of large flagstones. Along the southern edge of the dais was found a row of four Buddha images, nearly life size, prostrate but still *in situ*, and near the south-western corner a great heap of reliefs and statues, comprising also débris of at least two colossal images in stucco (Pl. XLVI, Fig. 28). To the north of the central dais and at a distance of only 11 feet rose another small platform (IV), circ. $7\frac{1}{2}$ feet square, around which statues, more or less broken, had been collected in numbers (Pl. XLV, Fig. 26). Further off to the north-west two badly decayed platforms could be traced, one measuring circ. 20 by 4 feet, the other 9 by 4 feet. From reliefs and statues found near by it is safe to conclude that they had served originally as image bases; but no later collection of sculptures had formed around them.

A striking feature of this ruin is the large platform, built of solid Gandhāra masonry in its lower portion, which extended to a length of over 40 feet south of the central Vihāra area and parallel to the above mentioned dividing wall. Its north face, as seen in Pl. XLIV, Fig. 23, was decorated to a height of circ. 3 feet with a stucco frieze, still in fair preservation for the greater portion of its length, showing a row of seated figures with halos, separated by broad pilasters with Indo-Corinthian capitals. Above this row of relief figures there extended a modillioned cornice and below it a plinth with simple but well-proportioned mouldings. The figures represented alternately Buddhas and Bodhisattvas, the latter also seated in the pose of meditation (*Dhyānamudrā*) but distinguished by rich collars and varying head-dress (Pl. XLIV, Fig. 24). The red paint, apparently minium, still attaching to several of these reliefs suggested that they all had originally been gilt. Of an upper frieze with much smaller Buddha reliefs only scanty traces survived. A considerable number of fine relief panels which were found close in front of this platform and usually leaning in a topsyturvy position against it, as if upturned from a higher level, made it quite clear that the whole platform must originally have served as a place of deposit for votive sculpture. Those among them which had remained on this platform must have lain more or less exposed on the surface, and their complete removal was thus likely to have taken place long ago. The back of the platform, facing south, showed only a plain stuccoed wall surface.

A much less substantially built platform, with projections, all stuccoed, was traced in its lowest portion along part of the west face of the Vihāra area. Placed against its northern end there was found a small cinerary urn, 7 inches high and about $3\frac{3}{4}$ inches wide at its mouth. It contained small fragments of burned bones, evidently human, and a coin unfortunately completely corroded. Another urn of similar shape but slightly larger was unearthed at the back of the large southern platform. (Pl. XLII, Fig. 18.) Two cinerary urns are recorded to have been found during the excavations made at Sahri-Bahlöl by Dr. Bellow and General Cunningham,¹ and a number of smaller ones were brought to light subsequently at

¹ See *Arch. Survey of India Reports*, V. pp. 41, 45.

mound E. It is thus certain that the custom of such funerary deposits with which I first became familiar in Chinese Turkestan, by finds at the foot of several Buddhist shrines and Stūpas at the Shikchin site (Ming-oi) near Kara-shahr, was practised already in Gandhāra.

I have referred already above to the broad pavement which extends along the greater part of the east side of the Vihāra area and was manifestly intended to serve as an approach to it from the passage between the southern platform and the monastic quarters. Some eight yards to the east of this pavement the excavations laid bare a perfectly preserved small tank, measuring at its top 10 by 6 feet and 3 feet deep (Pl. XLII IFig. 21). Its sloping sides were lined with hard-burnt bricks, $9\frac{1}{2}$ inches square. Such tanks, evidently needed for ritual purposes, were found also at the ruined shrines C and H, but in less good condition. A trough, roughly constructed of large stone slabs, was discovered a little to the north of platform IV. Another observation connected with the cult was supplied by the discovery of a large broken jar, $1\frac{1}{2}$ feet across at its broken top, near the south-west corner of the Vihāra area. It was closely packed with small earthenware 'Chirāghs', all about $3\frac{1}{4}$ —4" wide and less than one inch in height. The uniformly blackened snouts suggested that they had been used on the same occasion for some religious illumination corresponding to the Brahminical *Ārātrikā*. Here the find of a lump of coarse greenish glass, about $1\frac{1}{2}$ inches long, in the north-west corner of the Vihāra area may also receive passing mention. No fragments of glass were noticed elsewhere in the course of these excavations.

The sculptural remains of ruin D present a close similarity to those found at C, both in regard to character and to conditions of discovery. But it is noteworthy that the proportion of sculptures of manifestly decadent style is here much smaller, a fact which may safely be interpreted as a sign of this shrine having been abandoned somewhat earlier. On the other hand, as a result probably of more exposed condition, the total number of 'finds' was less, the inventory photographs comprising about 300 pieces, inclusive of fragments. To this number, however, must be added the numerous sculptures photographed *in situ* around the various platforms (see photographs Nos. 365, 371, 372, 379, 380, 382-387). Relievo representations of sacred scenes or fragments of such form the largest and iconographically most interesting portion of the 'find'. Among them reproductions of the 'great miracle of Śrāvastī' (Foucher) are particularly numerous (Nos. 397, 398, 399 (Pl. XLVII, Fig. 30), 400, 401, 403, 404, 408, 410, 411, 412). Several of these panels, like Nos. 397, 399, 401, surpass both in size and state of preservation any so far deposited in the Peshawar Museum. In No. 399 (Pl. XLVII, Fig. 30), a particularly well carved composition the typical lotus seat of Buddha appears supported by two elephants which, as M. Foucher points out, are substituted for the mythical serpents Nanda and Upananda by a kind of iconographic pun based on the double significance of the term *Nāga*. In another piece No. 410 the representation of the sea with various aquatic animals is very curious.

Incidents of Prince Siddhārtha's youth are represented by the visit of Asita and the casting of the horoscope (No. 403, Foucher) as well as by a fragmentary relievo showing the killing of the elephant at a city gate by Devadatta (No. 406). But

EXCAVATIONS AT SAHRI-BAHLOL

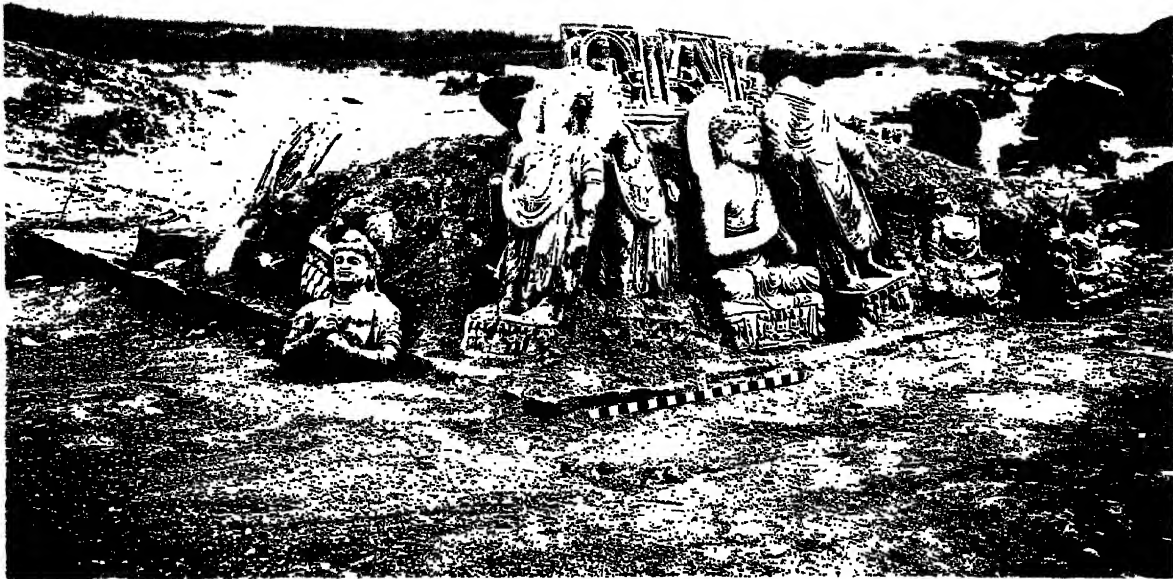


(Fig. 25) VIHARA AREA OF MOUND D, WITH SCULPTURES *in situ* SEEN FROM S W , AFTER EXCAVATION



(Fig 26) PLATFORM IV, MOUND D, SEEN FROM SOUTH, WITH SCULPTURES *in situ* AFTER EXCAVATION

EXCAVATIONS AT SAHRI-BAHLOL.



(Fig. 27). PLATFORM I, MOUND D, SEEN FROM S.E., WITH SCULPTURES *in situ*.
AFTER EXCAVATION.



(Fig. 28). SCULPTURAL REMAINS EXCAVATED AT II, MOUND D, SEEN FROM NORTH.

particular iconographic interest, as M. Foucher points out, attaches to the fragment of a relieve frieze (No. 413) where the Blessed One is shown as about to present the wicked Nāga enclosed in his begging bowl to the astonished old sage Kāśyapa whom two novices attend. The pose of the one crouching in terror under a column appears to M. Foucher particularly noteworthy as this characteristic detail makes it now possible to identify a scene published by Dr. Spooner from among his Takht-i-Bahī finds¹ as well as other hitherto unexplained groups among the sculptures brought to light by Dr. Spooner's previous excavations at Sahri-Bahlöl (Photographs Nos. $\frac{226}{626}$, $\frac{227}{626}$, $\frac{228}{627}$).

But in point of novelty the first place belongs undoubtedly to one of the statues which was found near the western end of the large platform V, and at first puzzled me greatly by its wholly unusual look and pose. As seen in Pl. XLVIII, Fig. 34, it represents a male figure seated on the ground with the right leg bent flat in front while the left is raised to the height of the knee. The head is covered with a mass of shaggy hair, a bushy moustache and beard add to its unkempt look. An ample cloak covers the body. The right arm is stretched out straight towards the ground where the right hand (now lost) must have rested for support. The left arm is bent back behind the head as if to grasp some object. The whole attitude is that of a man struggling to raise himself from the ground with a heavy load resting on his shoulders. That this load was a person there can be no doubt; for though the body is lost there remain the two hands by which the person to be lifted up held on to its bearded human mount. The left hand appears just above the latter's left armpit; the right which part of the forearm is stretched across the right side of its breast. The richly jewelled armlets which are shown above the right wrist make it certain that the person which the bearded figure is about to raise on his shoulders, as if for a ride, is a female. With this interpretation of the mutilated group once established it was easy for me to recognize that we have here a representation, and the only one so far known, of the frivolous legend, well-known in Buddhist tradition and also localized in Gandhāra, in which the Risi Ekas'ṛṅga or 'Unicorn' figured as carrying to town the courtesan who beguiled him.

The story was one of the most popular Jātakas and has found its way also into mediæval folklore. Hsüan-tsang relates it in connection with a convent which he places about a hundred *li* to the north-west of Po-lu-sha or Shāhbāz-garhi and 'to the south of a great mountain.'² Following up a hint first supplied by Colonel Sir Harold Deane I was able to trace the remains of this ruined monastery and shrine at the site of 'Būtān' near the southern foot of the Shāhkôt Pass and above the large village of Palai in Swāt territory.³ M. Foucher with true iconographic intuition had already expressed himself confident that a legend so popular, once localized in Gandhāra, could not have remained there altogether without sculptural representation.⁴ It affords me hence special satisfaction that the interpretation I

¹ See *Arch. Rep.*, 1907-08, Pl. XLIII, a.

² Comp. *Si-yu-ki*, transl. Beal, i. p. 113, where references to other records of the legend are given in a note; Watters, *Yuan-Chwang*, i. pp. 218 sqq., detailing several Indian and Chinese versions of the story; Julien, *Mémoires*, i. p. 124.

³ See my *Annual Report, Frontier Circle*, 1911-12, p. 5 sq.

⁴ 'Les ruines voisines de Palai nous doivent toujours la mise en scène du risi Unicorn (Ekaśringa) que Hsüan-tsang y a trouvée localisée; si profane que fût ce conte, première version de notre "laid" Aristote" et des fables qui débitent sur la licorne les *Bestiaires* du moyen âge, il n'était pas pour faire reculer les sculpteurs à qui nous devons les scènes de bacchanales figurées plus haut see Foucher, *L'art du Gandhāra*, i. p. 270.

proposed for this singular sculpture has met with his full approval. Regrettable as its mutilated condition is, enough remains of the saint's figure, circ $1\frac{1}{2}$ feet in height, to show the remarkable realistic skill with which it has been modelled. Once again we have a proof how cleverly these Græco-Buddhist sculptors of Gandhāra could fix their attention upon the most characteristic 'act' of a story and thus produce a significant representation of the legend with classical restraint in the setting.¹

Among other statues I may restrict myself to the mention of the Buddha figures seen in Nos. 408 and 413 which for excellent modelling and execution can well be compared with the best work found at the far greater shrines of Takht-i-Bahī and Jamal-garhi. The same may be observed of some of the Bodhisattvas and groups shown, as found *in situ*, by the photographs Nos. 380, 383, 384. That much of the stucco work was equally good in design can be seen from the perfect small Buddha in No. 420; the little figure kneeling in adoration (No. 422); and by a number of the small heads found detached and reproduced in Nos. 423-425.

Among decorative motifs it will suffice to call attention to the well-carved small Atlas figures in Nos. 403 and 406 and the corbel in No. 413 with the humorously treated lion which a child lets drink from a bowl (Fig. 8). Interesting ornamentation is seen also in the pedestals of a number of statues (see, *e.g.*, Nos. 395 and 396). Thus one of the bases reproduced in No. 396 shows the lotus seat of the figure resting upon a plinth decorated with an elaborate diaper of looped cords, an ornament mainly aiming at the effect of light and shade and curiously recalling almost identical motifs in late Hellenistic and Byzantine art.

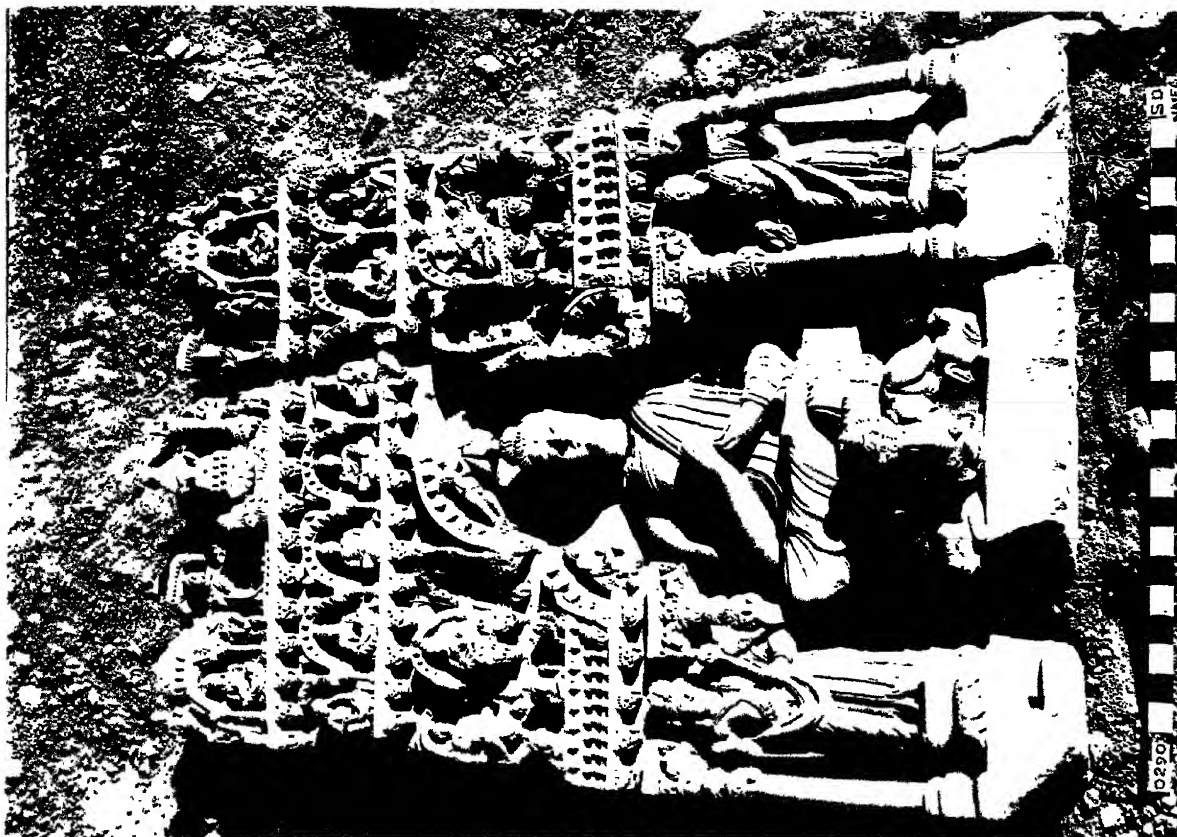
The third mound excavated this season and numbered E, was situated about 200 yards to the north of the centre of Sahri-Bahlōl village. Though small, it had attracted attention from the first by its elevation (Pl. LXIX, Fig. 35). This was rendered particularly conspicuous by the marshy depression from which it rose. Over its whole length, more than 180 feet, it was covered with large stones and rubble; at its western end it rose to fully 16 feet above the meadow level. The whole mound showed a fairly uniform width of about 100 feet. A few sculptural fragments scattered on the surface suggested that it contained a ruined shrine, and excavation soon proved this to be true, but at the same time revealed constructive features not previously met with at this site.

The most striking portion of the ruin (Pl. XXXIV) was revealed at the western

¹ Against this identification Mr Haigreaves points out that —

- (1) In the treatment of the hair and dress the figure bears no resemblance to any representation of a *rishī* yet identified in this school of art. Cf. Lahore Museum No 101, where the *rishī* Asita is represented with the matted locks and scanty garment of the present day *yogi*.
- (2) The arm with bracelet is not necessarily that of a female; similar ornaments appearing on male figures. Cf. Pl. XL., Figs. 11 and 12, above. Female figures frequently wear a succession of bracelets. Cf. Hanti, Lahore Museum No 2100. A courtesan would not be likely to observe any restraint in the matter of jewellery.
- (3) A person about to climb on the back of another would be inclined to throw the arms round the neck of the supporting figure and not assume a position as in the relief.
- (4) While the principal figure certainly resembles certain Atlantes of the school, yet in view of the head turned to the left and the uplifted left arm it may well be considered that it receives support rather than offers it.

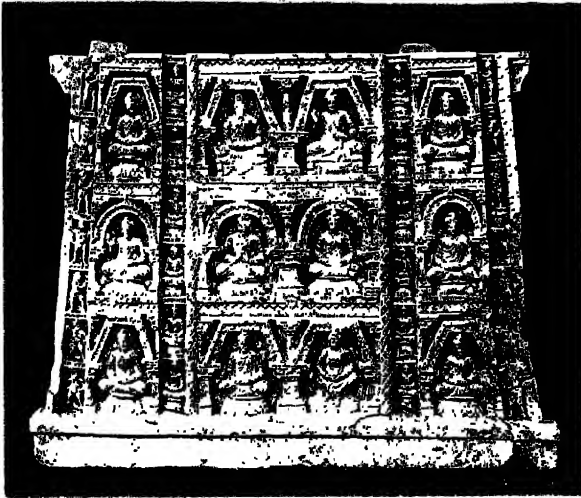
The force of these objections I am also inclined to admit (Ed.)



(Fig. 30.) RELIEVO PANEL WITH REPRESENTATION
OF THE "GREAT MIRACLE OF SRAVASTI," MOUND D.



(Fig. 29.) RELIEVO SHOWING BUDDHA PERFORMING
THE "GREAT MIRACLE OF SRAVASTI," MOUND C.



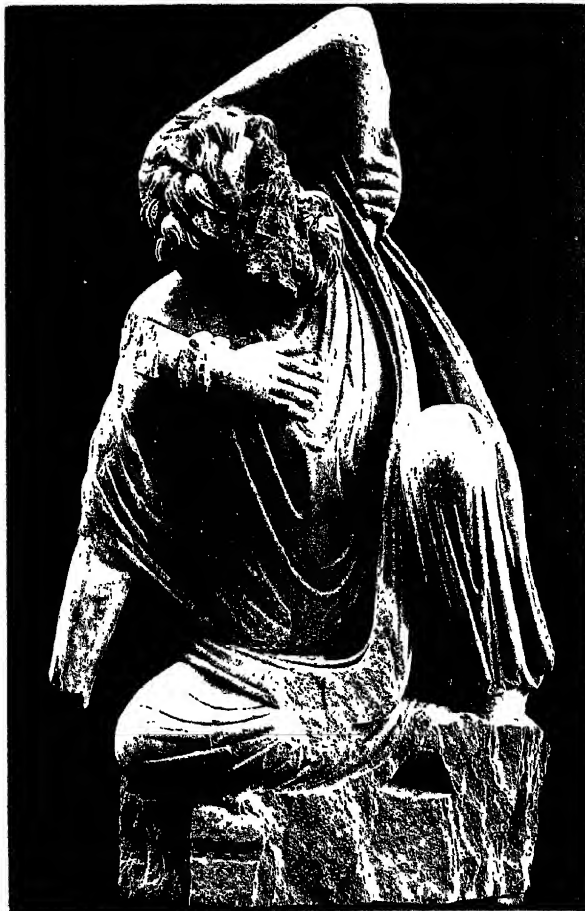
(Fig. 31.) RELIEVO PANEL
WITH BUDDHA FIGURES, ETC., MOUND D.



(Fig. 32.) STUCCO FIGURE IN NICHE, MOUND C.



(Fig. 33.) SEATED BUDDHA IMAGE, MOUND D.



(Fig. 34.) IMAGE OF RISHI EKASRINGA,
MOUND D.

extremity where a solid walled platform, built at an elevation of circ. 8 feet above the surrounding ground, raises its top to about 8 feet above the exposed base line. In its extant shape this platform (I) forms an oblong measuring 47 feet from east to west and a little over 29 feet across. That it had once borne some superstructure is quite certain; but of this owing to obvious quarrying by the villagers and possibly also some unrecorded 'excavations' nothing but a low plinth survived. This platform displays clearly marks of successive construction. The older portion, exposed along the whole of the west face and for about 27 feet of that part of the north face which adjoins, shows a plinth with bold mouldings and above this a wall-face with a well-carved row of pilasters. Of these four appear on the west face at intervals of 6 feet. Three others survive on the north face. This was surmounted by a boldly projecting dentilled cornice now mostly broken. The section shown in Pl. XXXIV and the photograph reproduced in Pl. XLIX, Fig. 36 will illustrate this architectural decoration. Whereas the plain wall-facing, like the plinth, shows the usual Gandhāra masonry, the pilasters and cornice are carved in a porous limestone resembling travertine. The mouldings above the plinth are carved in large slabs of sandstone. Of the stucco which originally must have covered the whole surface, traces remain in the recesses of the cornice. The pilasters, 2 feet 4 inches high, in shape and proportion recall those often seen in the architectural decoration of Græco-Buddhist reliefs and also in that of the platform V at ruin D. But the three clumsy leaves or shields which adorn their capitals, are but a sorry survival of the rich foliage shown by the Indo-Corinthian capitals usual in those reliefs. A similar arrangement of pointed leaves is found also on the capitals of the pilasters which decorate the temples at Kāfir-kōt on the Indus.¹

This original platform, which may well have been square, has been extended eastwards by an addition of which the perfectly plain wall is clearly seen both on the north and east faces. On the former the line of joining of older and later masonry (*a* in plan) is shown by the photograph in Pl. XLIX, Fig. 36. On the south the faces of both the original platform and its eastern extension are almost completely hidden by a still later addition (*b, b*) the coarse and much broken masonry of which projects some 15 feet beyond the original alignment. That this addition itself was built over some earlier structure was demonstrated by remains of a stuccoed wall (*c, c*) which came to light underneath it at a distance of 12 feet 9 inches from the south face of the main platform and approximately parallel to it. The base of this wall and of that forming the west face of the addition (*d, d*) reached down to a level 2 feet lower than the foot of the main platform near its south-west corner. A broad flight of stairs gave access from the east to the top of the additional platform (*b, b*) which still retained in parts the big slabs used for its flooring.

Apart from a low moulded plinth which the section on line C, D marks, no traces survive of the superstructure which the main platform, I, once bore. If its older western portion goes back to Buddhist times this may well have been originally a Stūpa. The fact of some relief fragments of undoubtedly Buddhist character having been discovered immediately to the north, east and south-east of I, would

¹ See *Archaeol. Survey Reports*, XIV, p. 27; pl. xiii.

support this assumption. At the same time it may be conjectured that the extension eastwards belongs to the period when a Brahminical shrine was established here; for some of the fragments of undoubtedly Hindu sculpture in white marble to which I shall presently refer, were found near it to the east and south-east.

The numerous alterations which this shrine had undergone, were strikingly reflected by the structural remains discovered in the court adjoining the main platform on the east. Two parallel flights of stairs leading up the top of the latter were still built in proper alignment. But the two low platforms of irregular oblong shape, II, III, which had been constructed across the court from the north-east and south-east corners of the main platform, are running distinctly askew. Between these two platforms and facing the flights of stairs there stood a base about 1 foot square with a circular stone drum obviously intended for a small Stūpa. A few feet to the east of it was found a stone drum, 2 feet across, bearing on its top an Amalaka-shaped stone which from the large circular hole in its centre may be assumed to have served as the base for a wooden pillar. In the central cavity of this stone two copper coins of the Hindu Shāhi dynasty were discovered, one bearing the name of Venkadeva, and the other less well preserved, apparently an issue of Spalapatideva, the two together definitely proving that worship continued here down to the 10th century A. D.¹

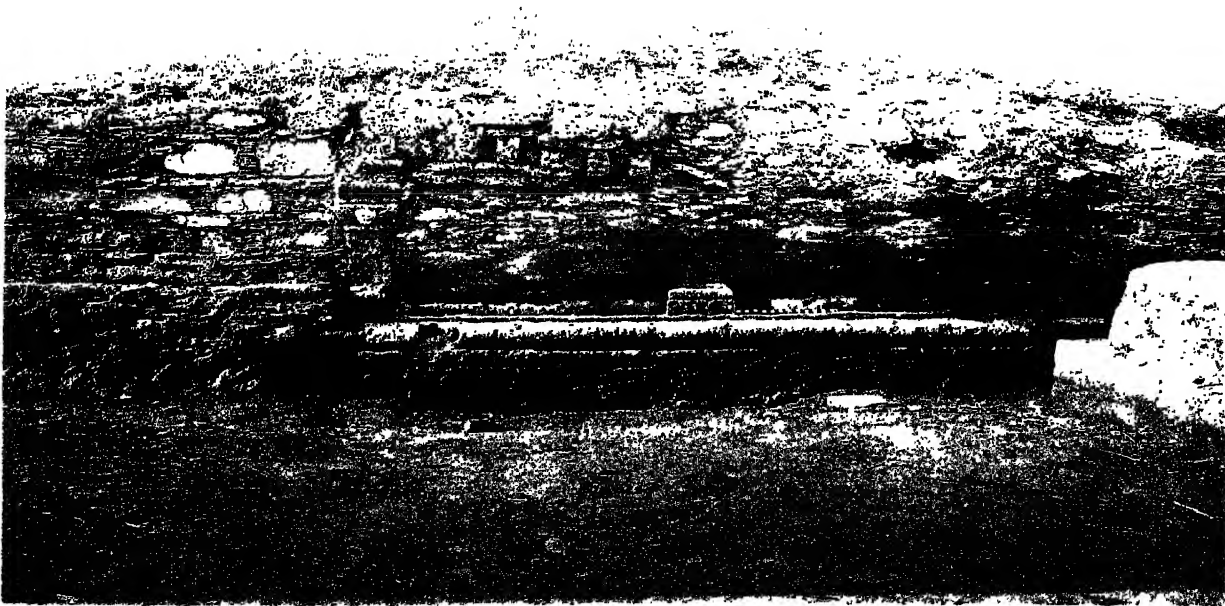
The court extended some 36 feet to the east and was bordered there by a low wall of Gandhāra masonry, IV, in part 6 feet broad, which probably had served at an earlier period as the base for an image platform such as found at D and H. Foundations of walls enclosing the whole sacred area were discovered along the whole of the north-east and south sides but at a level so much below the various platforms as to leave no doubt about their having served merely for an enclosure. At five points within this enclosure small square foundations were traced, evidently intended for Stūpa bases. The largest of these, to the north of I, measured about 7 feet square. Built against the outside of the eastern enclosure wall and on a level about 5 feet lower, were found remains of walls forming small square rooms which probably had served as quarters for monks or priests. In one of these, V, were found three much-decayed fragments of Buddhist reliefs placed side by side against the wall facing the narrow entrance. The small dark cell is not likely to have ever served for worship, and it is far more likely that the fragments had been brought here for safety by some late devotee. Remains of stairs leading up to the top of the foundation of the eastern enclosure wall indicated where the main entrance to the shrine lay.

The sculptural finds at this ruin were limited to about three dozen pieces, mostly fragments, a fact easily accounted for by the exposed condition of the mound which must always have been a handy quarrying place for the villagers. But there are quite sufficient to prove that a Buddhist Vihāra had been converted here into a Hindu temple. Of the Buddhist sculptures, prevailing in number and practically all small reliefs, only a narrow frieze with the well-known motif of garland carrying *amoriṇi* need be specially mentioned as it manifestly formed part of a small Stūpa base. The

¹ The types correspond to Nos 2 and 5 of Plate VII in Cunningham's *Medieval Coins of India*; but the reverse of the second coin is completely effaced. Both pieces show long wear.



(Fig. 35.) MOUND E, SEEN FROM SOUTH, BEFORE EXCAVATION.



(Fig. 36.) NORTH FACE OF MAIN BASE, MOUND E, AFTER EXCAVATION.

relics of the Hindu shrine consist chiefly of some well-carved but distinctly late looking fragments of small divine figures in white marble, one among them manifestly a Laksmī. This material is of interest as I had found it long ago among the scanty remains of Hindu shrines surviving at Und, the ancient Udabhāṇḍa, on the Indus which served as the Gandhāra capital under the 'Hindu Shāhis of Kābul.'

It is characteristic that these relics of Hindu sculpture at E include also a panel with an erotic scene carved in low relievo, nothing similar being found at any of the Buddhist ruins. The torso of a relatively large and well-modelled female figure, also probably of Hindu origin, may find mention on account of its unusual material, terracotta. Four small cinerary urns, only 3-4 inches high, were found deposited near the old part of the main platform I. at the foot of the north and west faces. There was no definite indication of the period to which they belong. For the chronological determination of the ruin it is important to note that the only coin finds made besides the one already mentioned consisted of two copper pieces of the Hindu Shāhi dynasty. One of these, found some 15 feet to the north of the main platform shows the type of Bhīmadeva, illustrated by Cunningham's unique coin No. 18; the other found near platform II is badly worn, but probably belongs to one of Venkadeva's common issues as represented by Nos. 2, 3 in Cunningham's *Coins of Medieval India*.

The excavations at the next two mounds cleared, F and G, can be dealt with more briefly as the remains of Buddhist shrines there found were too badly decayed to present much of novel interest. Mound F situated about 600 yards to the north-west of Sahri-Bahlöl village and close to the south of mound B cleared by Dr. Spooner in 1909-10, showed up as a low ridge rising scarcely more than 5 feet above the neighbouring ground. It measured circ. 250 feet from north to south, with a width nowhere more than 120 feet. On the south it proved to hide the remains of the stone-built foundation walls of what manifestly were monastic quarters (Pl. XXXV) including a hall measuring inside 30 by 21 feet. Adjoining them on the north there came to light the outlines of a large stone-edged dais measuring 46 feet on its south side and on it traces of a low base, showing twenty-two facets and about 32 feet in diameter. The stuccoed sides of this base rose only a few inches above the level of the dais, and this together with the scanty amount of earth covering it seemed to suggest rather a platform for images than the base of a Stūpa. A much smaller oblong platform close by, surmounted by a square base, occupied the northern end of the dais. The shallow cover of earth covering all these remains contained very little of the usual débris, thus suggesting early exploitation and subsequent ploughing over of the site. The finds of Græco-Buddhist sculpture were confined to about two dozen fragments of relievos, among them a representation of Buddha's first sermon near Benares. The style of most of the decorative pieces indicated a late date. With this it fully agrees that the three copper coins found here all attach themselves, as far as their very poor state of preservation permits me to judge, to the type current under the Later Great Kushanas and their successors, the 'Little Kushanas' or Kidāra.

Mound G, another low scrub-covered mound, lay circ. 800 yards to the north-west of Sahri-Bahlöl village. I measured close on 300 feet from east to west

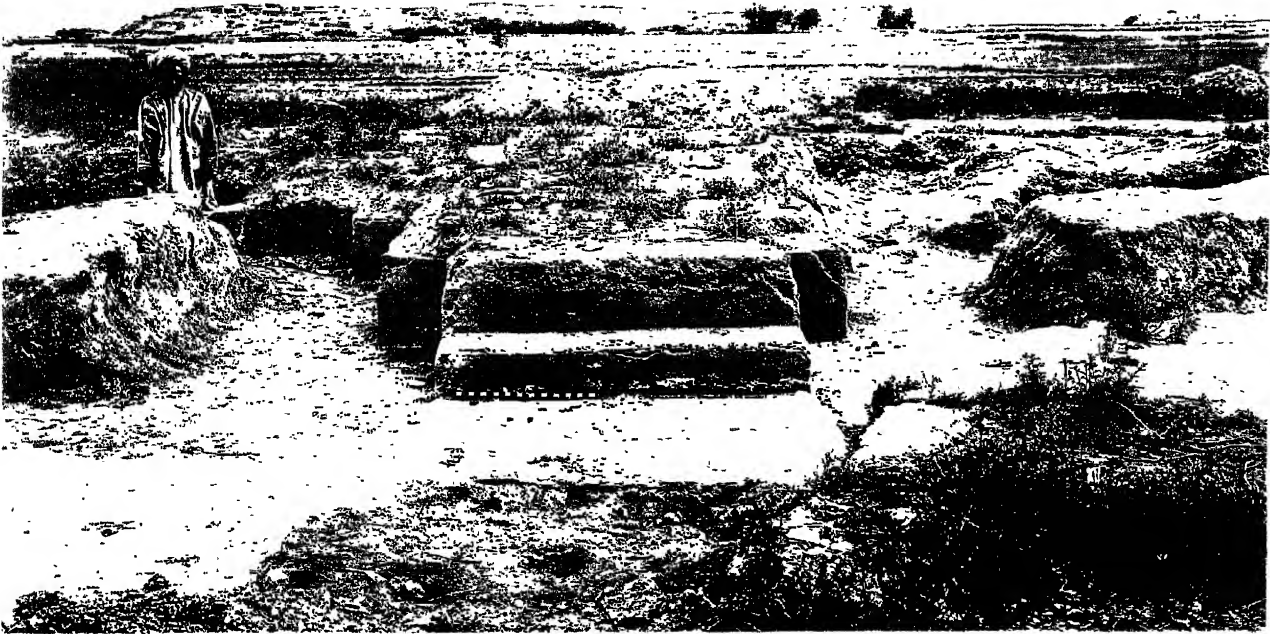
and about 200 across where widest. Wall foundations in solid Gandhāra masonry came to light in the west, indicating the position of the monastic quarters. These comprised a hall measuring inside 56 by 40 feet (Pl. XXXV). But of the shrine which was attached to this establishment nothing could be traced except the low remains of a Stūpa base plastered in stucco which were unearthed to the east of the quarters (Pl. XXXV). Insignificant as it looks, this base yet shows a ground plan which is of distinct interest; for with but slight variations, though on a much smaller scale, it reproduces the very peculiar shape of the base of that imposing Stūpa which I discovered in 1901 at the great Vihāra of 'Rawak' in the desert to the north of the Khotan oasis¹.

Just as at Rawak the orthodox square of the Stūpa base has been transformed here by a series of bold projections into a symmetrically developed cross. Each of the four arms of the cross extended about 21 feet on the lowest level, as measured from the centre of the base. It seems certain that, as at the Rawak Stūpa, the projections on each face were meant to support flights of steps. But as the total extant height of the base where best preserved, is only about 2 feet not more than two of these steps now survive. If we assume the proportional arrangement of the upper storeys to have been the same as at Rawak—a supposition for which, of course, it is impossible to advance definite proof—the diameter of the Stūpa dome measured here about 11 feet as against the 32 feet of the Turkeṣtān ruin. Unfortunately neither structural nor decorative remains have survived of the Stūpa proper or of the Vihāra containing it, and in the absence of any other indications such as coins no definite opinion as to its date can be formed. But it is important to note that the extant ground plan of Kanishka's famous Stūpa as disclosed by the excavations at Shāhji-ki-dhērī² also resembles the Rawak model though not as closely as does the small Stūpa just described.

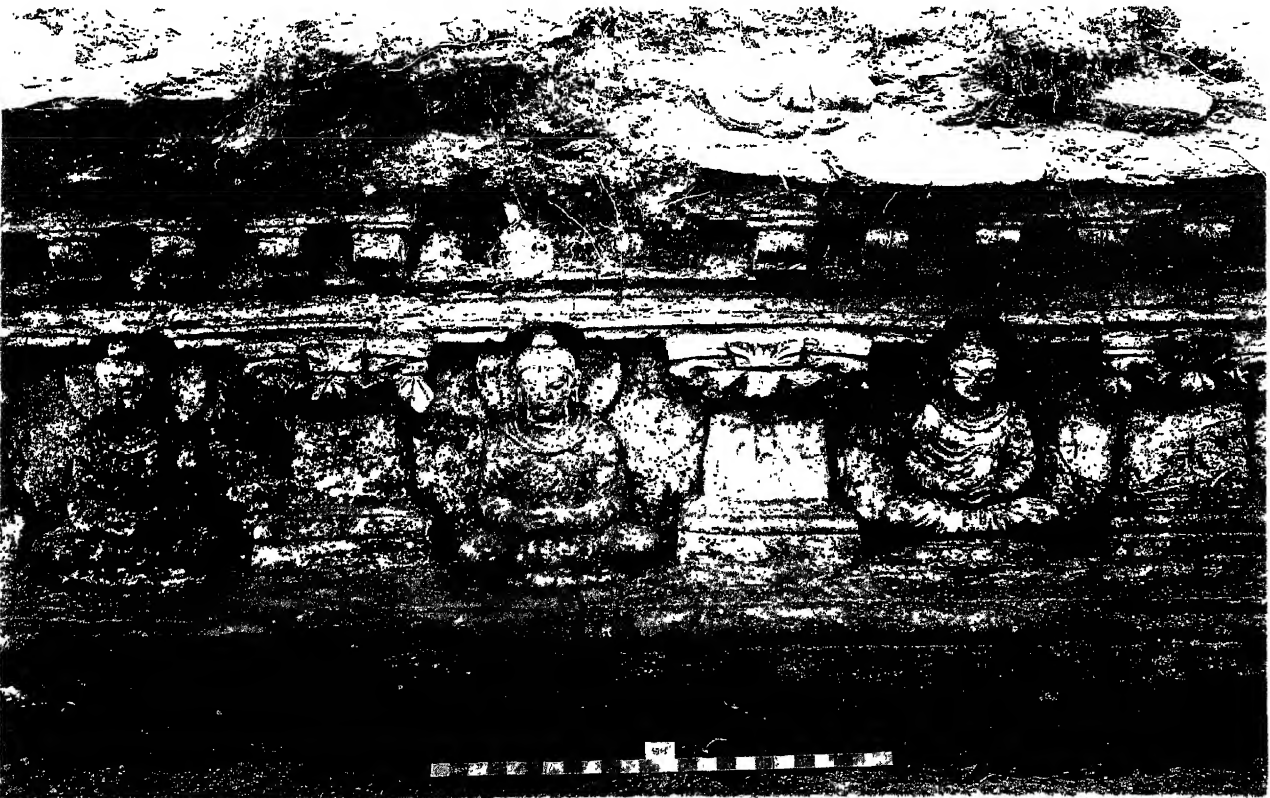
Mound H, the last to be excavated, was situated circ. 200 yards to the north-west of G and about the same distance to the south-east of the hamlet called Sāduddīn-Korūna which itself occupies the site of some ruined shrine, as proved by remains of sculptures. The mound measured some 280 feet from north to south and about 180 feet across. As it rose nowhere more than about 5 feet above the level of the immediately adjoining ground excavation proceeded rapidly and soon proved that the mound was hiding the remains of a Vihāra exactly conforming in type to those of C and D, together with adjoining monastic quarters (Pl. XXXV). The masonry foundations of the latter were brought to light on the north side and indicated the existence of a central hall about 35 by 40 feet of which the walls must have been partly lacking stone foundations. The remains of the Vihāra area to the south, though extensive, did not reveal any novel features. But the number of sculptural finds, mostly in stucco and broken, was considerable. The central area of the shrine was marked by a low and relatively large dais (Pl. XLIII, Fig. 22), measuring 52 by 43 feet and edged with a stone pavement. Two small stuccoed platforms occupied portions of its eastern face, and five more, as the plan shows, were discovered to the north and east of it. One among them measured 26 by 21 feet.

¹ Comp. *Ancient Khotan*, i pp. 485 sq., ii. Plate xl.

² See *Annual Report*, Frontier Circle, 1910-11.



(Fig. 37.) REMAINS OF CROSS-SHAPED STUPA BASE, MOUND B, SEEN FROM NORTH, AFTER EXCAVATION. SAHRI-BAHLOL VILLAGE IN BACKGROUND.



(Fig. 38.) PORTION OF STUCCO FRIEZE ON NORTH FACE OF PRINCIPAL PLATFORM, MOUND H.

Most of them showed a square shape and were manifestly intended to serve as Stūpa bases ; but all had badly decayed and only one, IV, retained traces of its decorative frieze with pilasters. Of the statues which once probably clustered about the central dais only few had survived. But one of them representing a Maitreya Bodhisattva, nearly five feet high (Pl. XL, Fig. 10) was found *in situ*, prostrate but with the base still between the stones which had been fixed for its socket (see VI in plan). Near the end of a stone pavement projecting to the south from the central dais, remains of a stone drum were discovered which probably belonged to a small Stūpa, together with several of the stone umbrellas surmounting it.

The best preserved feature of the ruin is the stucco-decorated base of a long platform or wall which turns at a right angle round the north-west corner of the Vihāra area. On the portion, 39 feet long, which faces south towards the Vihāra court, much of the stucco ornamentation of the base has survived. It shows a row of seated Buddha figures between pilasters with Indo-Corinthian capitals, the whole being raised on a moulded plinth and surmounted by a modillion cornice. Above the latter a second row of smaller seated figures seems to have existed. In character and style this decoration so closely resembles the long stuccoed frieze described at D that no wide interval can be assumed to separate the periods when the shrines D and H were deserted. Yet from the absence at H of stone sculptures of superior workmanship and from the relative frequency of pieces of coarser modelling among the very numerous stucco heads, it seems reasonable to assume that the ruin H represents a somewhat later foundation.

However this may be, it is clear that subsequent spoliation must have been far more thorough here to account for the rarity of statues and reliefs in stone. Among the latter it will suffice to mention a representation of Buddha's departure from the royal palace (No. 480) ; the child's offering of the bowl of dust and a well-carved frieze with garland-carrying *putti* (No. 481). Among the stucco sculptures which abound in all sizes and evidently formed the chief decoration of the various platforms and bases, special mention may be made of a number of false niches, up to 2 feet in height, containing chiefly seated Buddha figures. The varying forms of their arches, trefoil, horseshoe or that with sloping sides, aptly illustrate the architectural devices which must have given diversity to the superstructures, now completely decayed, of all these Vihāras and chapels.

AUREL STEIN.

EXPLORATIONS AT MATHURĀ.

a. Excavation at Māt.

THE startling discovery of a statue of King Kānishka in the neighbourhood of Mathurā (vulgo Muttra) has already been announced to the learned world.¹ It was due to Pundit Radha Krishṇa, Rai Bahadur, under whose supervision the site where the image had been found by him has subsequently been wholly examined. In the present paper it is my object to give an account of the Pundit's explorations.

The village of Māt is situated about 9 miles north of the city of Mathurā, on the left bank of the river Jamna. Some 6 furlongs to the north-east of the village on the north side of the road to Rāyā there is a flat mound covered with jungle and known locally as Tōkrī Tilā. On this mound which before excavation was highest towards the west and gradually sloped down towards the east, fragments of statues were noticed by Pundit Radha Krishṇa who after considerable difficulty owing to the opposition of the villagers obtained permission to examine the site with the results that he acquired the statue of Kānishka as well as the other images of Kushāṇ Kings to be described below.

The excavation covered an area of about 220 feet from east to west by about 130 feet from north to south. Evidently the mound had been exploited by the neighbouring villagers for the sake of bricks, as the remains of walls discovered were scanty and fragmentary. Nor did they rise anywhere to a considerable height. The work had consequently to be executed with the utmost care so as to lose no scrap of evidence which might help to explain the nature of the building which once stood on this site.

It will be seen from the plan published in Plate LI that the fragments of walls laid bare partly form rooms. This is especially noticeable in the south-western portion of the mound where we find a distinct row of such rooms.

It is evident both from the smallness of these chambers which measure less than 3' in both directions as well from the absence of doors that they cannot have been used for monks' cells or for image shrines. It also deserves notice that no finds of

¹ *A S R* for 1911-12, part I., pp. ff., plate , *Journal Punjab Historical Society*, Vol II (1912), pp. 39. ff. plate I. The present paper deals with excavations carried out on various sites near Mathurā during the seasons of 1910-11 and 1911-12.

any kind were made within their walls. The irregular position and very rough construction of the inner walls also plainly indicates that they were not meant to be exposed to view.

From the above facts it is manifest that the pieces of walling now exposed belong to a rectangular plinth measuring about 100 feet from east to west by 59 feet from north to south. On this plinth there once stood a building of which not a trace now remains. Its position may be conjectured from the nature of the walling in the middle of the western half of the mound where some scanty remains of a circular structure can be distinguished. This was evidently the point from which the builders started laying their foundations and it seems reasonable to assume that this marks the position of the building as apparently at this point the foundations were more solid than elsewhere. The adjoining walls still rise to a height of 6' 2". For the rest, the walls form cell foundations, irregular inside but built in a regular row along the edge of the plinth. This outer row of foundation cells is formed by two parallel walls 24" wide, *i.e.*, the length 15" *plus* the width 9" of a brick. These two parallel walls have almost completely disappeared but their position is evident from that of the transversal walls. The almost complete disappearance of the two parallel walls forming the plinth is no matter of surprise, for the villagers digging for bricks would first of all strike those walls and follow them up, carefully removing brick after brick. This explains why only some small portions here and there have escaped destruction.

Along the northern side of the supposed plinth a retaining wall has been built, probably to strengthen the structure. The wall in question retains remnants of plaster, plainly indicating that the surface was intended to be exposed to view.

On the south-east end are the remains of a ramp, evidently belonging to a flight of steps leading up to the plinth. Here also the outer surface on the north side has remnants of plaster.

As to the building which once stood on the plinth, there can be little doubt that it was the temple (*dēvakula*) mentioned in two inscriptions found on the site. From what has been said above it may be concluded that the temple stood on the western half of the plinth and consequently faced the east (or to speak quite correctly, south-east), the steps leading up to it from that side.

At some distance from the supposed plinth there are remnants of masonry foundations which in all probability mark an enclosure, rectangular in shape, which may have contained rows of dwelling rooms.

The statue of King Kānishka together with the lower half of a divine image and an inscribed pedestal were found a little to the south of the supposed temple site. We may perhaps conjecture that they once occupied a subsidiary shrine or chapel built on the plinth at the side of the temple. A torso of another statue of a Kushāṇ King was found at a little distance further to the south, and on the supposed temple site the lower half of a colossal statue of a Kushāṇ King seated on his throne. At first sight it might appear that it was placed inside the temple as an object of worship. The circumstance, however, that sculptured fragments belonging to this statue were found further east within the plinth area militates against such an assumption. The following is perhaps a more acceptable explanation. The

upper half of the seated image was recovered by Pundit Radha Krishna at some distance to the west being worshipped as Baran, *i.e.*, Varuna, the god of the waters. I presume that the person who found the image tried in the first place to remove it bodily to the tank, but after moving it some little distance towards the west found it too heavy and gave up the attempt. He then broke the image in two and removed only the upper half. This statue bears indeed evident traces that it was broken systematically and with a certain amount of care.

The tank where the Kushān King had to discharge his novel task of Varuna was also partly excavated. It is constructed of large bricks of exactly the same size as those used in the supposed temple plinth. (Pl. LII, Fig. 2.) There is, therefore, good reason to assume that this is no other than the tank (*pushkarani*) mentioned in the inscription of the seated statue as having been constructed at the same time as the temple. In the excavation of the tank some Nāga images and other sculptures were discovered.

One of the Nāga images (1' 6½" high) is four-armed and holds a plough in one of his left hands. This is particularly interesting as the plough is the typical attribute of Baladev or Balarām, the elder brother of Krishna whose close connection with Nāga worship I have pointed out on a previous occasion.¹

I now proceed to describe the images found at the Māt site.

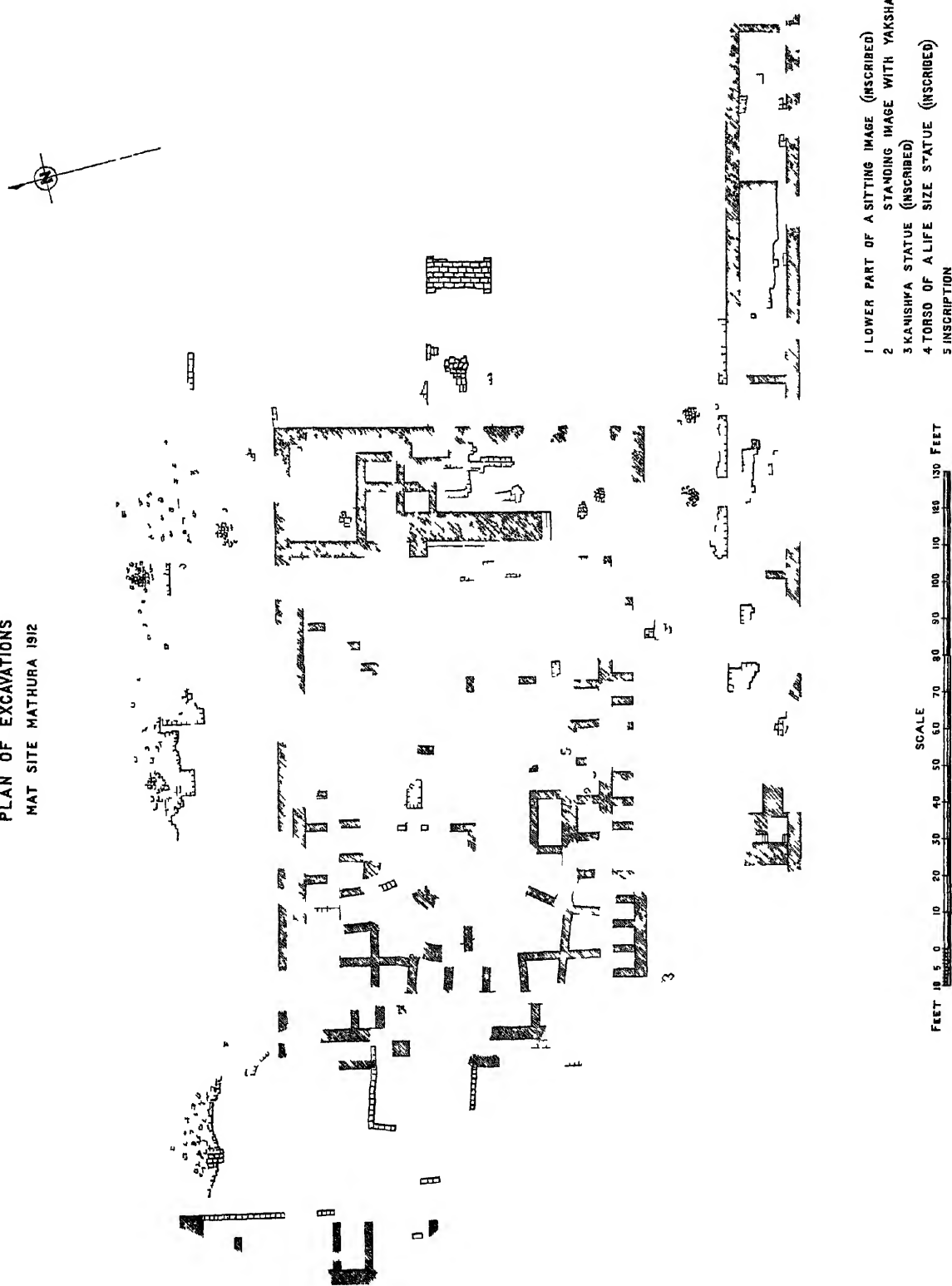
b. IMAGES.

The image of King Kānishka is a life-size statue (height 5' 4" including base) of which the head and both arms are lost. (Pl. LIII.) It shows the king standing, his right hand resting on a mace and the left clasping the hilt of the sword. Kānishka is clad in a tunic reaching down to the knees and held round the loins by means of a girdle, of which only two square plaques are visible in front. It may be that these plaques are meant for a buckle, but more probably they indicate a belt consisting of a series of such plaques such a belt as we find on the torso discovered on the Māt site. (Pl. LV, Figs. 7 and 8.) So much is certain that in reality these plaques must have been of metal, perhaps of gold. The remainder of the belt is concealed by a long upper garment which falls below the knees and is consequently somewhat longer than the undergarment. Both garments are plain, only the seam being shown. The folds of the robes are indicated by very shallow lines, a reminiscence of Hellenistic influence. Most conspicuous are the very heavy boots with straps round the ankles similar, as Dr. Stein points out to me, to those worn now-a-days in Turkestan.

The plain dress of the king contrasts strongly with the elaborate weapons. The sword has a long hilt decorated on the top with what appears to be a swan's or parrot's head. In the actual sword itself this head may have been of ivory or of jade. The sheath is decorated with three plaques which must represent metal and are similar to those of the belt. The point of the sheath is broken off. It is curious that the sheath is not attached to a belt, but is fastened by means of two straps to the upper garment. Both, which in reality may have been of leather, are wound

¹ A. S. R. for 1908-09, p 159.

PLAN OF EXCAVATIONS
MAT SITE MATHURA 1912



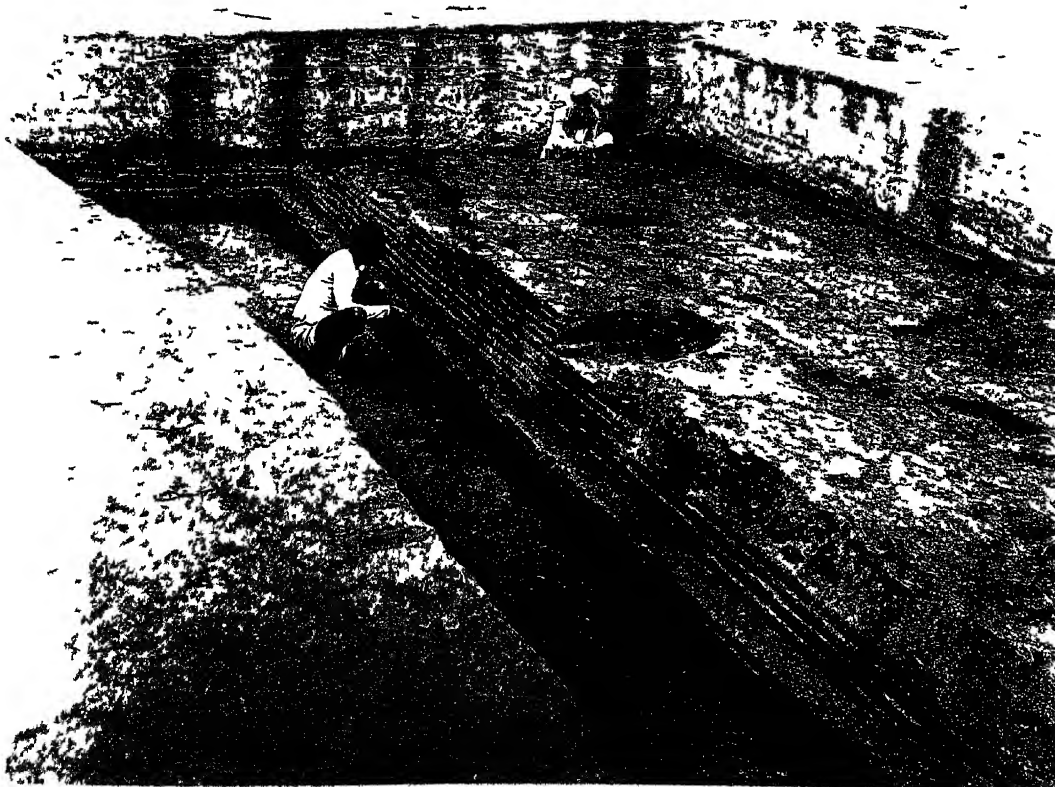
PLAN OF SITE OF MAT, AFTER EXCAVATION

LINDSAY BY W. L. H. CRIGGS LONDON W. C.

Photomount 242



(Fig 1) VIEW OF MAT SITE (N W)



(Fig 2). VIEW OF TANK.

once round the sheath and then passed under a projecting tongue on its upper side, one ending in a circular disc which in reality may have been of precious metal.

The other weapon is a mace, 3' 5" long including the handle. The real thing was probably made of wood strengthened with five metal bands which are clearly shown in the sculpture. The portion between the first two bands nearest the handle is round, the middle portion between the second and fourth band is sixteen-sided, only half projecting from the garment. The remaining portion is eight-sided, only three sides being actually shown in front and two partly at the sides. The fifth and lowest band is decorated with a *makara* head which like the bands themselves was probably also of metal. It may appear somewhat doubtful whether this mace was really used as a weapon or was only a wand of office, a kind of sceptre¹. But to me the former appears more probable. It will be seen that it tapers, being broader at the base than towards the hilt. This suggests a weapon. Indeed the whole appearance of the Kānishka statue suggests a warrior not delighting in costly dress but trusting in his good sword.

The image of Kānishka is not in the round and differs in this respect from the other statues of Kushāṇ kings to be noted presently. The back shows only a curved line which may have been an indication of a circular halo round the head.

Regarding the identity of the figure there cannot be the slightest doubt. Across the lower portion of both garments there runs an inscription in one line, 23" long including the gap caused by the mace which intervenes between the first and second word. The script is Brāhmi. The *aksharas* are perfectly clear and measure from 1" to 2½". It reads :

Mahārājā rājātirājā dēvaputrō Kānishkō "The King, the king of kings, his Majesty Kānishka." The form Kāniskha with long *a* which is also found in the Bōdhisvattva image inscription from Sarnath² deserves notice.

Evidently the inscription was incised last of all, as some of the lines indicating the drapery run through the *aksharas*.

Of no less interest than the Kānishka statue is the colossal image of a king seated on the throne. (Pl. LIV) Its total height is 6' 10", its square base 3' 3". It was found in two pieces; one consisting of the throne seat with the lower half of the image up to the lions had been placed at the neighbouring tank and the other, the torso and arms, was still in the mound, the head being broken off. The two pieces fit together. It looks as if the image had been wilfully broken, the break showing a series of holes as if made with some sharp tool. The lower fragment is much damaged, both knees being broken off.

The king is seated in European fashion on a throne or *simhāsana*, as indicated by two lions placed on either side. Only the front portion of these lion figures is shown the rest being concealed by a cloth hanging down on both sides from the seat of the throne. The right hand of the king which is raised in front of the breast, evidently held a sword of which only portions of the hilt are still traceable. The

¹ Elphinstone describes the appearance of Shāh Shuja 'the Amir of Afghanistan' as follows, "At this audience the King wore a high cap of plain red cloth, with a black velvet band round the bottom. He had no jewels on; a mace, a sword, and a carbine, lay before him on a cushion."

Elphinstone, *An account of the kingdom of Caubul*, 2nd ed., London, 1842, Vol. I, p. 93.

² *Ep. Ind.*, Vol. VIII, p. 176.

left hand is broken but it would seem that it rested on the scabbard laid across the knees. This object though much damaged, is still distinct together with the strap with which it was attached. Further details, however, are irrecoznizable. Over the head of the lion to the proper right there is a confused mass of cords and on the left side there seems to have been something similar.

The throne has a straight back the upper portion being broken off with the head. On the proper left side behind the shoulder the bars are indicated and some vase-shaped ornament. On the back of the stone there are some deep-cut lines running down as if indicating a cloth hanging down over the back of the throne. Similar lines are shown on the left shoulder and left upper arm of the image (not on the right side). There is also an indication of a cloth hanging down the back of the image from both shoulders, *viz.*, between the image proper and the back of the throne.

The enthroned monarch is dressed in a long-sleeved tunic with richly embroidered borders nearly 3" broad which are shown running down the breast in a double band and must have been continued over the knees, and the lion heads of the throne. The embroidered seam is again visible on both sides where the lower portion of the garment is spread out over the seat of the throne. The right sleeve shows similar ornamentation. The left hand, as noticed above, is destroyed. The tunic is dotted all over with little rosettes like sprigged muslin, and on the top of the right sleeve just beneath the shoulder we notice a slightly projecting circular disc, 3" diameter. The two sides of the tunic are not joined immediately below the throat but somewhat lower down like a modern coat except that there are neither lapels nor collar. Thus a triangular space is left where we notice a lower garment with narrow seam along the throat. The ornaments are few consisting only of a torque and a thin bracelet round the wrist. Very remarkable are the heavy top boots which are decorated with a band of vine pattern 3" wide running from the toes upwards. As in the case of the Kānishka image there is a strap round each boot beneath the ankles and a second strap under the heel. To each strap is attached what appears to be a spur. Both feet are placed on a low stool (28" × 13" × 3½') decorated in front and on both sides with a band of stars. The front is partially obliterated.

The colossal seated image bears an inscription on the top of the base between the feet. It consists of four lines, the first line being 8½" and the fourth one 15½" long. The *aksharas* are from ¼" to 1¼" in height. The character is Brāhmī of the Kushān period. It reads:—

1. *Mahārājā rājātirājā dēvaputrō.*
2. *Kushānaputra [Shahi Vamataksha] masya.*
3. *Bakanapatina Huma...[dēvakulu] kārīta*
4. *ārāmō pushkarini udapāna [cha] sa-da [kothako].*

The inscription records the construction of a temple (*dēvakula*, a garden (*ārāma*), tank (*pushkarini*) and a well (*udapāna*). We have already pointed out that the temple must have stood on the Māt site, but has wholly disappeared except for some remnants of the masonry plinth on which it was raised. The tank is still extant to the east of the village of Māt and has been partly excavated. (Pl. LII.) The name of the donor is unfortunately lost but seems to have commenced with a syllable *Huma*. The preceding word *Bakanapatina* is possibly a title. The inscrip-



(Fig. 3.) IMAGE OF KING KANISHKA.

tion further mentions a Kushān king whose name is indistinct, but appears to be Varmatakshama or Vamatakshuma. This name is unknown to history; the first portion reminds one of the name Wema Kadphises or Oohmo Kadphises of the coins. In the inscription the king has not only the full royal titles found in records of the period but is distinctly described as *Kushānaputra*. Next I wish to note the torso of the standing male figure 4' in height to which reference has already been made. (Pl. LV, Fig. 7.) It is carved in the round. The dress consists of a tunic reaching down to the knees, which across the breast and along the lower border is decorated with a broad band imitative of an embroidered seam. Most remarkable is the beautiful belt consisting of a row of plaques some square and others round each decorated with a peculiar figure or ornament. Of those in front the round ones show the well-known fish-god so common in sculpture of the period and the square ones a horseman with high cap who carries a mace or lance over his shoulder. Round the neck we notice a thin torque.

The figure evidently carried a sword fastened by means of a strap, still extant, which is round the right hip, the sword hanging down on the left thigh. Of the sword itself only some traces remain, from which it may be conjectured that the figure clasped the hilt with his left hand. The position of the right hand it is impossible to determine, but evidently it was free from the body, as on this side there is no break. It may perhaps also be conjectured that the right hand was raised at the level of the shoulder, an attitude common in the statues of this period.

Below the garment a portion of the right leg remains, from which it appears that the figure wore top-boots as in the Kānishka statue and the seated image described above. On the lower portion of the robe is a fragmentary inscription in Brāhmī of the Kushān period. Only three complete *aksharas* and part of a fourth *akshara* remain. They read *Mastana*.

A sculpture of a type very different from those described above is the lower half of a standing image almost life size (height 3' 8"). (Pl. LV, Figs. 9 and 10.) It is of the well-known Bōdhisattva type of the Kushān period as represented by the inscribed statues of Sārnāth and Sahēth-Maheth. In the present instance the Bōdhisattva is accompanied by a dwarf or Yaksha, standing on his right, whose head and right arm are lost. Without the head its height is 16". It has a prominent abdomen and little legs and holds a round object in its left hand. The right is broken.

The image is curved in the round, as is not uncommon in statues of the Kushān period but an exceptional feature is the figure of a lion carved on the stone its head being behind the little Yaksha.

It will be remembered that the Bōdhisattva of Sārnāth has a lion figure between his feet. Possibly, there as in the present instance, the lion indicated that the statue represents Śākyasimba, the Lion among the Śākyas.

The sculpture last described was found together with the Kānishka statue. On the same spot was discovered a Sanskrit inscription consisting of six lines, but unfortunately seriously injured. It probably belongs to the reign of Huvishka whose name and titles are twice mentioned in it, and seems to record the restoration of a temple, perhaps the same, the foundation of which is recorded in the inscription on the seated image. The stone on which this inscription is incised must have been

the pedestal of a statue of which traces of the left foot still remain on the top. From the position and shape of this foot it would seem that the statue to which it belonged had large boots like the three images of Kushāṇ princes described above.

It is not impossible that the inscribed pedestal formed part of the same image as the torso with the belt discovered at a little distance. But from the sculptured fragments found in the course of excavation it is evident that there must have been at least one more image of the same type as the three described above. Some of these fragments appear to belong to the seated monarch, as they show the same decorative border indicating the embroidered seams of his robe. But there is one piece showing part of a neck with torque which must have formed part of a fourth image. (Pl. LVI.) There are also portions of a belt similar to that of the torso which cannot possibly belong to any of the three images described.

Apart from the great historical interest of the Māt images, they seem to me to adduce important evidence in two questions, one pertaining to art and the other to religion.

A study of the Mathurā school of sculpture has led me to the conclusion that the great flourishing period of the Gandhāra school must have preceded the reign of the great Kushāṇa rulers, Kānishka and his successors. The relic casket of Peshawar discovered by Dr. Spooner points to the same conclusion and the newly discovered image of Kānishka confirms my first theory.

The sculptor of the Kānishka image has shown considerable skill in faithfully portraying the great King. The details of the sword and mace are shown with the greatest care. But the maker of this image whatever his nationality may have been, was certainly not inspired with the ideals of Grecian art. The indication of the drapery alone seems to retain a faint recollection of classical sculpture. The characteristic features of the statue are rigidity and strict symmetry. The pose is singularly ungraceful and the whole sculpture is flat. It is difficult to believe that this barbarian statue is contemporaneous with the graceful Bōdhisattvas of Gandhāra which, with some propriety, used to be described as "royal figures."

In view of the discovery of the Kānishka statue, Dr. Spooner's interpretation of the remarkable female image found by him at Sahribahlol as that of a queenly donor, gains in probability. But it seems far less probable that the pious lady would be the consort of King Huvishka and that in the head with the aquiline nose found along with it we are to see Huvishka himself. I should feel more inclined to seek a name for it among the Yona princes who preceded the great Yue-chi barbarians.

The religious question I wish to refer to is that relating to Sun worship in India more particularly from an iconographical point of view. It is puzzling that Sūrya, the Sun-god, is represented with top-boots which would seem to be particularly inappropriate in the case of a deity invariably placed in a chariot. The chariot is, of course, a very old and undoubtedly original feature as it is in close agreement with literature. In the older sculptures the chariot of Sūrya is drawn by four horses in later (medieval) sculpture by seven horses. I believe that the top-boots of Sūrya must in some manner be connected with the statues of Kushāṇ princes in which the high-boots are such a striking and certainly un-Indian feature.



(Fig. 7.) TORSO OF KUSHANA PRINCE,
FRONT VIEW.



(Fig. 8.) THE SAME, BACK VIEW.



(Fig. 9.) STATUE WITH LION, FRONT VIEW.



(Fig. 10.) THE SAME, BACK VIEW.

Whether the Kushāns actually set up images of the Sun-god dressed after their own fashion cannot at present be decided, but it seems a very plausible assumption.

The favourite attitude of the Kushān Kings on their coins is that of pointing to a fire altar. The Sun-god frequently occurs on their coins and on his relic casket Kānishka is shown being crowned by the Sun and the Moon. Is it not likely that the worship of Mithra-Mihira was introduced and patronised by the Kushān Kings? It was about the same time when this cult spread over the Roman empire.

c. Mora.

The site of Mora is best known in connection with the so-called Mora well inscription in which a son of the *Mahākshatrapa Rājūvula* is mentioned. The term well inscription would seem to imply that it is a record referring to the construction of well. This, however, does not appear to be the case, though the slab, which measures no less than 11' 2" by 2' 11" was found by General Cunningham in the terrace of an ancient well.¹ This position accounts for the destruction of part of the inscription. It has now been removed to the Mathurā Museum, but since its discovery by General Cunningham thirty years ago several more of the *aksharas* have been lost. Apart from the mention of the son of Rājūvula the only certain point with regard to this inscription is that in the second line it refers to "images of the five heroes" (*pamcha Virānām pratimā*). These words are distinct on Cunningham's facsimile, but I must add that at present the passage in question is totally destroyed.

When visiting the Mora site I noticed some fragments of stone images lying on the site of a round shrine, and as they were evidently of a very early date, it occurred to me that there might possibly be some connection between these fragmentary sculptures and the "images of the five heroes" mentioned in the inscription. It seems quite plausible that these "five heroes" were the five Pandava brothers, whose exploits are extolled in the *Mahābhārata*. The fragments themselves, however, do not afford any evidence in support of this conjecture. They consist of two torsos of male images, the lower half of a female statuette and the pedestal of a standing image of which only the feet now remain. The photographs reproduced in Plate LVII will render a detailed description superfluous. One point which deserves special notice is the circumstance that they are all carved in the round, a peculiarity only found in sculptures of the Śunga and Kushān periods.² Moreover, the female statuette has an inscription which is unfortunately mutilated, but proves that the sculpture was made in the days of the great Kushān rulers.³ (Pl. LVIII, Fig. 19.)

The finding of these sculptures though inconclusive in itself seemed to bear promise of further discoveries of importance, and I consequently arranged for excavations to be carried out on the Mora site under the supervision of Pandit Radha Krishṇa. His explorations did not yield anything to elucidate the meaning of the so-called well inscription or its supposed connection with the fragmentary

¹ Cunningham, *A. S. R.*, Vol. XX, pp. 48 f, plate V, 4 Fleet, *J. R. H. S.* for 1907, p. 1024. *Mathurā Museum Catalogue*, p. 184 Lude's *List of Brahmi inscriptions in Ep. Ind.*, Vol. X, appendix, p. 3 No. 14, and p. 162, No. 14

² Cf. *Mathurā Museum Catalogue*, pp. 109 ff, Nos. E20-23

³ I have referred the inscription to the reign of Huviṣka but Professor Lude's *List*, p. 163, No. 14-B (1357), assigns it to Kānishka's reign.

images. Though in this respect these excavations were disappointing, they resulted in the discovery of a number of fragments of very large inscribed bricks ($16\frac{1}{2}$ " by 8" by $2\frac{1}{2}$ ") which may be assigned to the third or second century B. C. From the different fragments we obtain the following legend, in which only one missing *akshara* has been supplied: *Jivaputāyē Rājābharyāyē Bṛihāsvātī mīta [dhi] tu, Yaśamatāye Kārītam* "Made by order of Yasamata, the daughter¹ of Bṛihāsvātimita, the king's consort and the mother of living sons." (Pl. LVIII, Fig. 16.)

We may perhaps identify the Bṛihāsvātimita of these inscriptions with Bahasatimita (*Skr. Bṛihaspatimita*) whose coins have been found at Kōsam (about thirty miles south-west of Allahabad and at Ramnagar (Ahichchhatra) in Rohilkhand.² His daughter, Yaśamatā, was probably the wife of the ruler of Mathura, whose name is not mentioned. As already stated, I would assign these inscriptions to the third or second century B.C., which is the approximate date adopted for Bahasatimita. It deserves notice that the term Jivaputra³ "a mother of living sons" occurs also in the Śunga inscriptions of the railing of Bodhi Gaya.

d. Gaṇēshrā.

Another site examined by Pandit Radha Krishna was that of Gaṇēshrā, a village situated some three miles west of Mathurā city to the north of the road to Govardhan. The site comprises three distinct mounds. Several ancient sculptures were known to have come from this neighbourhood, including a life-size Bodhisattva statue, obtained by Dr. Führer and placed by him in the Lucknow Museum.⁴ A seated image, also apparently a Bodhisattva, was found inside a well near the village of Gaṇēshrā and acquired for the local Museum by Pandit Radha Krishna. Both these sculptures belong to the flourishing period of the Mathurā school and are of particular interest on account of their close relationship to the Bodhisattva type of Gandhara.

Another incomplete inscription in two lines on a rounded piece of red sandstone found in the second Gaṇēshrā mound reads as follows:—(1).....sa *Kshaharāta* *Ghaṭākasa* ..., (2)ye *thupa pati* ... Notwithstanding its very fragmentary state this short record is of interest for two reasons. (Pl. LVIII, Fig. 17.) First of all there can be little doubt that it records the constitution of a *stupa* (Prakrit *thūpa*). The word following *thūpa* may be safely restored as *patithāpita* (Sanskrit *pratishṭhapitaḥ*). We may add that the monument in question was in all probability Buddhist. A stone parasol which was found lying at the foot of the mound, and which had previously been taken to the Museum, perhaps once surmounted the *stūpa* referred to in the inscription.

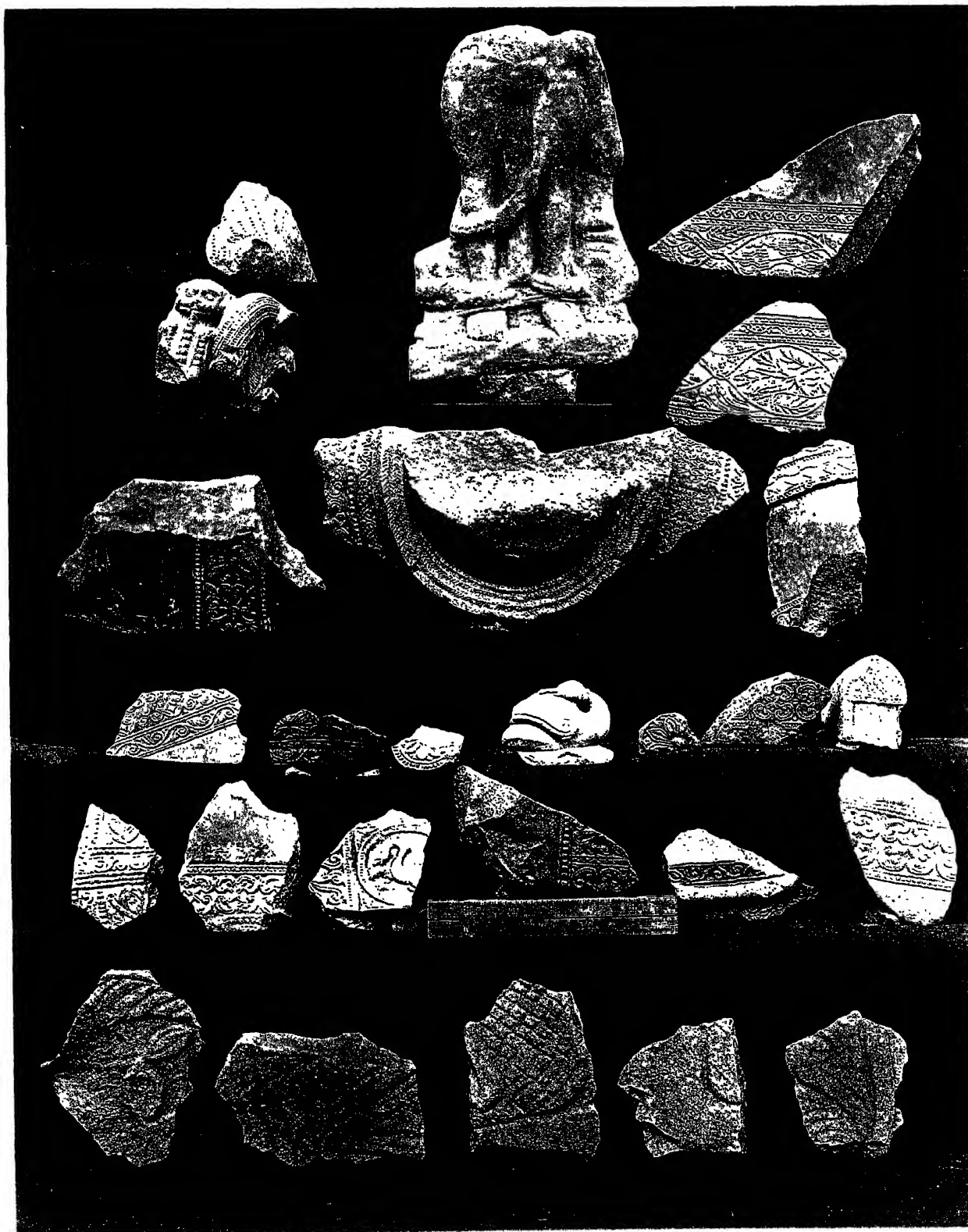
The second point of interest is the word *Kshaharāta*, which occurs in the first line. This term is well known from some of the Western Cave inscriptions which mention the Kshaharāta king and Satrap Nahapāna. The Kshaharāta clan, according to Mr. V. A. Smith, probably a branch of the Śakas, held sway in Western

¹ The *r* stroke of the syllable preceding *tu* is still partly preserved.

² Cf. V. A. Smith, *Catalogue of the coins in the Indian Museum, Calcutta*. Oxford, 1906, pp. 146, 155, 185.

³ Cf. A. S. R. for 1908-09, p. 147, footnote 3.

⁴ Cf. Mathura Museum Catalogue, pp. 57 f, No A45. Plate X and A. S. R., 1909-10, p. 67, Plate XXIII, d.



(Fig. 11.) CARVED FRAGMENTS FROM MAT.

India in the end of the first and in the beginning of the second century of our era. It is of some interest to find a Kshaharāta mentioned here in an inscription from Mathurā. Unfortunately the epigraph is too fragmentary to allow our drawing any certain conclusions from it. It may, however, be assumed that the word immediately preceding Kshaharāta was *kshatrapasa*, if we may judge from what remains of the missing letters.

The syllable *yē* preceding the word *thūpa* would seem to indicate that the *stūpa* was not founded by the Kshaharāta satrap Ghaṭāka himself, but by one of his female relations. The name of Ghaṭāka does not seem to occur on coins or in any other epigraphical documents. The character of the inscription agrees closely with the Brāhmī used in the records of the reign of Kanishka ; it may even be earlier.

The same mound produced twenty-four inscribed bricks and brickbats. (Pl. LVIII, Fig. 18.) Two of them are complete ($13\frac{1}{2}$ by $10\frac{1}{4}$ by 3 inches), and contain the following legend : *Rōhadēvasa Kōhaḍa [sa]*. Portions of the same word, sometimes in reversed order, occur on several of the brickbats. On some of the broken bricks we find the name *Gōmita* (Sanskrit *Gōmitra*) or the compound *Gōmitāmacha* (Sanskrit *Gōmitrāmātya*) usually in the instrumental case, the word *kāritam* following. In one case we have *Gōmitasa amach [ēna]*, and in other . . . *chēna Kōhaḍe [na]* which I propose to complete as *Gōmitāmachēna Kōhadēna kāritam*. We may infer that Rōhadēva Kōhaḍa (Kohala ?) was the minister (*amātya*) of Gōmita, and as it follows that the latter was in all probability a local ruler, it is very tempting to identify him with the Gōmita or Gōmitra whose coins have been found at Mathura.¹ The date of the inscribed bricks must be the third or second century B.C.

List of inscribed bricks from Gaṇēshrā Mound No. 2.

a & b. Two complete bricks $13\frac{1}{2}'' \times 10\frac{1}{4}'' \times 3''$. Inscription along one of the short sides, 9 letters

Rōhadēvasa Kōhaḍa [sa].

Aksharas 1" high, character pre-Kushā :

c. Brickbat $8'' \times 1\frac{1}{4}'' \times 3''$.

[Kō] -ha-dasa Rōhadē [vasa].

d. Almost complete brick $9\frac{1}{2}''$ (incl) $\times 3\frac{3}{4}'' \times 3''$ Inscription complete but indistinct

—hadēvasa Kōha [ḍasa].

e. Almost complete brick (overburnt) $9\frac{1}{2}'' \times 9'' \times 3\frac{1}{4}''$ Inscription complete, but indistinct

Kōhaḍasa Rōhadēvasa

f. Brickbat $3\frac{1}{2}'' \times 5\frac{1}{4}'' \times 3''$

—sa Kōhadasa

g. Brickbat $6\frac{1}{4}'' \times 3'' \times 3\frac{1}{2}''$.

Kōhadasa Rōha [dēvasa]

h. Brickbat $6'' \times 5'' \times 2\frac{3}{4}''$.

Kōhaḍasa (end of brick).

i. Brickbat $5\frac{3}{4}'' \times 5'' \times 3''$.

Kōhaḍasa—

j. Large brickbat $10'' \times 8'' \times 3\frac{1}{4}''$.

Rōha—

¹ Cf. V. H. Smith, *Catalogue of the Coins in the Indian Museum, Calcutta*, pp. 190, 194.

- k. Small brickbat $4\frac{1}{2}'' \times 3\frac{1}{2}'' \times 2''$.
Kō [ha].
- l. Large brickbat $9'' \times 7'' \times 3\frac{1}{2}''$ only two aksharas $1\frac{1}{2}''$ high.
Gōm [e].
 Empty space before *aksharas*.
- m. Large brickbat $9'' \times 5'' \times 5''$.
Gōm [e] *tasa ama* [cha].
- n. Small brickbat $7'' \times 3\frac{1}{2}'' \times 3\frac{1}{2}''$.
 [Gō] *mitāmachēna*.
- o. Brickbat $5\frac{1}{2}'' \times 6\frac{3}{4}'' \times 3''$.
Gōmitā—
- p. Brickbat $6\frac{1}{2}'' \times 4'' \times 4''$.
 [na] *hāritāṁ*
- q. Brickbat $4\frac{1}{2}'' \times 5'' \times 3\frac{1}{2}''$.
machēna.
- r. Brickbat $5\frac{1}{2}'' \times 4'' \times 3''$.
Gōmi—
- s. Small brickbat $4'' \times 3'' \times 3''$.
 [Gō] *m* [ita].
- t. Large brickbat $8\frac{3}{4}'' \times 4'' \times 4''$.
 —*ritāṁ* (space behind).
- u. Brickbat $6'' \times 4\frac{1}{2}'' \times 3''$.
 [chēna] *Rōha*.
- v. Brickbat $7'' \times 6'' \times 5''$.
 [chēna] *Kōhadē*—[na].

Among the few sculptural fragments which came to light on the Gaṇēshrā site I wish to mention a life-size head (ht. 15") with elaborately carved turban and a mortice hole at the top. The nose and chin are broken. It occurred to me that possibly this might be the missing head of the Bodhisttva statue acquired by Dr. Führer from Gaṇēshrā and now preserved in the Lucknow Museum. At my request the head was sent to Lucknow, but unfortunately it did not fit on the sculpture in question. The same mound (No. 2) yielded numerous fragments of a sandstone railing decorated with the usual rosettes. This railing must have been of very small size, the cross bars measuring about 15" in length.

e. Jaisinghpura.

Near the village of Jaisinghpura which is situated 3 miles from Mathurā in the direction of Brindāban, there is a mound which also marks the site of a Buddhist sanctuary. Mr. Growse obtained here two railing pillars of the type usual at Mathurā. On one side they show a female figure with flowers in her left hand standing under a balcony, over which one or two heads are visible. The reverse is carved with a medallion containing a conventional lotus or a *stūpa* with streamers and parasol.¹

Here also Pandit Radha Krishna carried out some trial excavations but the season of 1910-11 was then too far advanced to allow of a complete examination of the mound.

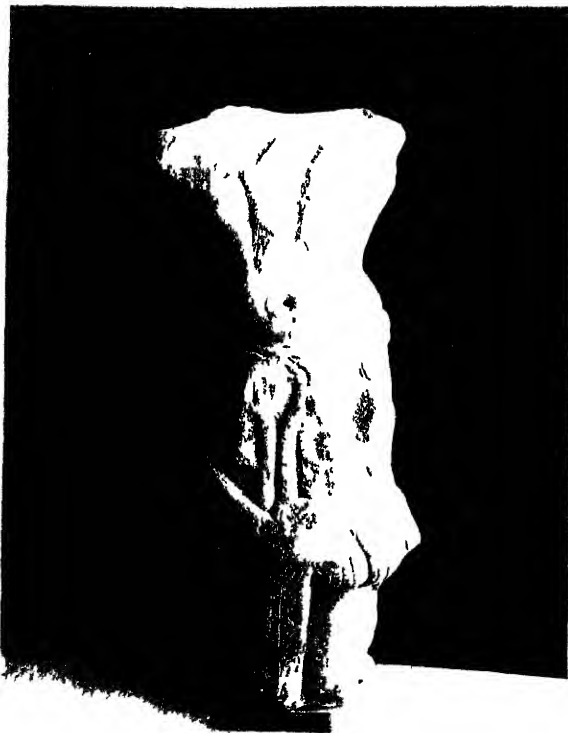
¹ Cf. *Mathura Catalogue*, pp. 14 ff. 4; Nos. J., 10 and 11; Plate XXIII.



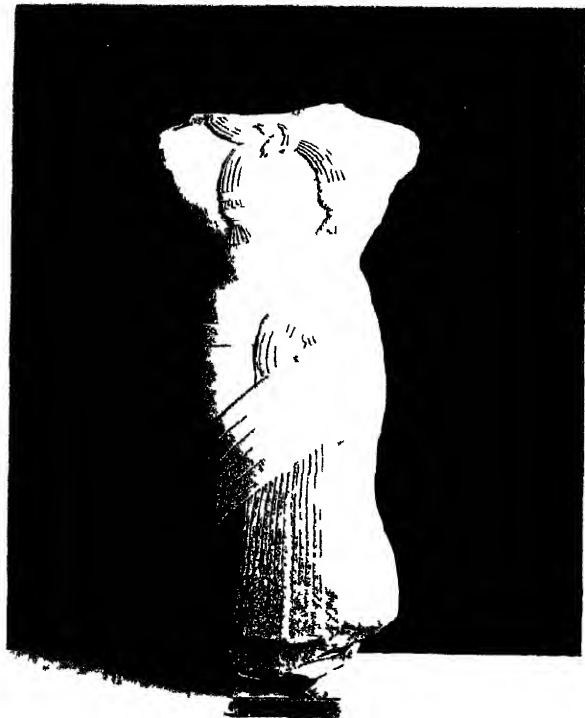
(Fig. 12.) TORSO FROM MORA, FRONT VIEW



(Fig. 13) THE SAME, BACK VIEW



(Fig. 14) TORSO OF ANOTHER STATUE,
FRONT VIEW.



(Fig. 15.) THE SAME, BACK VIEW.

The sculptural remains found in the course of excavation include fragments of Buddha images and of very elaborate haloes, the former apparently belonging to the Kushāṇa and the latter to the Gupta period, some lions, two *garuḍas*, and fragments of a stone railing.

A find of some interest is a clay tablet or sealing (ht. o.m.075) of a type commonly found on Buddhist sites but of which hitherto no specimens had come to light at Mathurā. The centre is occupied by a miniature Buddha figure seated in the earth-touching attitude (*bhūmisparśa-mudra*) indicating the supreme moment of the Bōdhi or Enlightenment. Originally this Buddha must have been placed between two standing Bōdhisattvas, presumably Avalōkitēśvara and Maitrēya, but only the figure to the proper right is still preserved. The lower portion of the seal area shows three figures of diminutive size such as are usually found on representations of Buddha's enlightenment. In one of them we may perhaps recognise the earth goddess, who, according to the Buddhist scriptures, was called upon by Buddha to bear testimony to his meritorious acts in his previous existences.

Between these figures and the Buddha with attendants there runs a line of inscription, but the *aksharas* which appear to be Brāhmi of the Gupta period are of so small a size that it seems hopeless to attempt to decipher the legend.

f. The Katra.

Finally I must briefly note some excavations carried out by Pandit Radha Krishna during the cold season of 1911-12 on the site of the Katra which forms part of the modern city of Mathurā (*Vulgo Muttra*). This site is one of unusual interest.

At present the Katra mound is crowned by a large mosque, of red sandstone, usually indicated by the name of Idgāh. It was built by the Emperor Aurangzeb on the ruins of the great temple of Kesab Dev (Skt *Kēśava Dēva-Vishnu*) which had fallen a victim to his iconoclastic zeal. This temple was seen and described by the travellers Tavernier, Bernier, and Manucci in the beginning of Aurangzeb's reign.¹

Tavernier says, "At Cheki-sera there is one of the grandest pagodas in India with an asylum for apes, both for those commonly in the place and for those which come from the neighbouring country, where the *Banians* provide them with food. This pagoda is called Mathurā; formerly it was held in much greater veneration by the idolaters than it is at present. That was because the Jumna then flowed at the foot of the pagoda and because the *Banians*, both those of the place and those who came from afar in pilgrimage to perform their devotions there, were able to wash themselves in the river before entering the pagoda, and on coming out of it before preparing to eat, which they must not do without being washed; besides they believe that by washing themselves in running water their sins are more effectually removed. But for some years back the river has taken its course to the north, and flows at a good *coss* distance from the pagoda; this is the reason why so many pilgrims do not visit it now."

¹ Tavernier, *Travels in India* (transl. Ball) London, 1889, Vol. I, pp. 104f. Bernier, *Voyages* (Amsterdam 1699) Vol. II, p. 76. Manucci, *Storia do Mogor* (transl. Irvine). Vol. I, pp. 298 ff.

Bernier speaks of "Mathuras où on voit encore un ancien et magnifique Temple d' Idole", and Manucci mentions an ancient Hindu town called Matora (Mathurā) distant eighteen leagues from Āgrah where there is an imposing temple.

The Kēshab-Dēv temple, of which the foundations can still clearly be traced, stood again on earlier remains of Buddhist origin. This became at once apparent from General Cunningham's explorations on this site in the years 1853 and 1862, which opened the era of archæological research at Mathurā. Among his finds was a standing Buddha image (height 4' 3½'), now in the Lucknow Museum, bearing an inscription which is dated in the Gupta year 230 (A.D. 549-50), and records that the image was dedicated by the Buddhist nun Jayabhaddā at the Yaśā-vihāra.

Several Buddhist sculptures, mostly of the Kushāna period, have since been discovered in the Katra mound. So that there can be little doubt, that it marks the site of an important monastic establishment. It was particularly one "find" which seemed to call for further investigation. Dr. Fuhrer¹ while describing his last explorations of the year 1896 on the Katra, says the following, "About 50 paces to the north-west of this plinth [of the Kesab Dev Temple] I dug a trial trench, 80 feet long, 20 feet broad and 25 feet deep, in the hope of exposing the foundations and some of the sculptures of this ancient Kēśava temple. However, none of the hoped for Brahmanical sculptures and inscriptions were discovered, but only fragments belonging to an ancient Buddhist *stūpa*. At a depth of 20 feet I came across a portion of the circular procession-path leading round this *stūpa*. On the pavement, composed of large red sandstone slabs, a short dedicatory inscription was discovered, according to which this *stūpa* was repaired in samvat 76 by the Kushana King Vasushka; unfortunately, I was unable to continue the work and lay bare the whole procession-path, as the walls of the brick sub-structure, adjoining the Masjid are built right across the middle of this *stūpa*."

Unfortunately the inscription referred to by Dr. Fuhrer was never published, nor were estampages of it known to exist. Since the discovery of the inscribed sacrificial post (*yūpa*) of Isāpur had established the fact that between Kanishka and Huvishka there reigned a ruler of the name of Vāsishka, it became specially important to verify the particulars given by Dr. Fuhrer in the above quoted note.

The endeavours made by Pandit Radha Krishna to recover Dr. Fuhrer's inscriptions were not crowned with success. It is true, however, that on the spot indicated the remains of a brick *stūpa* honeycombed by the depredations of contractors came to light. This monument, however, cannot be assigned a date earlier than about the sixth century of our era. Of the circular procession path of red stone slabs mentioned in Dr. Fuhrer's report, no trace was found, but at a much higher level there was a straight causeway of stone referable to about the 12th or 13th century A. D. Evidently it has nothing whatsoever to do with the *stūpa*. The causeway in question, which is 48' long, 4' 6" wide, runs straight from north to south and is constructed of large sandstone slabs roughly dressed and apparently obtained from different quarries. The size of these stones shows considerable variation, one measuring 6' 6" by 1' 6" by 9" and another 4' 7" by 1' 7" by 9". The

¹ *Annual Progress Report of the Archæological Survey, Circle North-Western Provinces and Uduh, for the year ending 30th June 1906, pp. 1 ff.*



(Fig. 16.) INSCRIBED BRICK FROM MORA.



(Fig. 17.) INSCRIBED STONE FRAGMENT FROM GANESRA.



(Fig. 18.) INSCRIBED BRICK FROM GANESRA.



(Fig. 19.) INSCRIPTION ON A FEMALE FIGURE FROM MORA.

causeway consists of a double layer of these slabs laid three by three, the whole being very irregular. The slabs were bound together with iron clamps, some of which still remain. Five of the stones are marked with a trident (triśūl).

At a very low level a heavy brick wall which rises to a height of 22' was laid bare and traced over a distance of 54'. It is constructed of very irregular masonry, some of the bricks measuring 11" by $8\frac{1}{2}$ " by $2\frac{1}{2}$ ".

In the course of excavation numerous sculptural fragments came to light, mostly of a late date and apparently decorative remains of the Kēśab Dēv temple destroyed by Aurangzēb. Among earlier finds I wish only to mention a broken fourfold Jaina image (*pratimā sarvato bhadrīkā*) with a fragmentary inscription in Brāhmī of the Kushāṇ period. I read it . . . *Khātō Vācha [kasya] suryyato sadāsasya nirvarttanā ā . . . rakasye bhattidāmosyā*.

J. PH. VOGEL.

EXCAVATIONS AT KASIĀ.¹

THE ancient Buddhist site at Kasiā in the Gorakhpur district of the United Provinces was again attacked this year. Exploratory operations were resumed on the first of December 1911 and carried on up to the end of March 1912. Out of the sum of Rs. 3,000, provided from Imperial funds for the Archæological exploration of this site, Rs. 2,589-6-9 were spent on labour and the rest on compensation for land acquired for excavation, transport of finds and other contingencies. As in the previous year the work was done under my supervision and I was assisted by Babu Bhura Mall and Munshi Ghulam Muhammad. The clerk had to go on sick leave and the work of keeping accounts and registering finds also devolved upon me. The photographer was deputed to the Frontier Circle of the Survey and his functions were ably performed by Babu Bhura Mall. The head draftsman M. Ghulam Muhammad who joined me late in the month of March assisted me in keeping the rolls as well. In all, seven drawings and twenty photographs connected with the excavations of this year were prepared by the said draftsmen, some of which will be used to illustrate this note.

The explorations of this year have enabled me to unearth several buildings and other antiquities of great interest. Though no such document was brought to light which could finally settle the identity of Kasiā, yet the results obtained this year are by no means unsatisfactory.

Excavation round the plinth of the so-called Nirvāṇa temple (Pl. LIX) has revealed the remains of some buildings of the Mauryan period and it is not unreasonable to assume that the plinth is built on the residue of very ancient monuments and that its examination will be fruitful. Digging on the north and west sides of it brought to light highly interesting terra-cotta figures as well as clay sealings bearing the name of *Mahāpari nirvāṇa*. They will be noticed in the sequel. Besides these and several *stūpas* opened this year, I succeeded in laying bare the remains of three complete monastic buildings on the main site and some mysterious structures near the Rāmābhār *stūpa*. The Māthā-Kūār monastery was fully traced out and the Anrudhvā mound thoroughly explored. A few more structures have also been partially exposed.

¹ On previous explorations at Kasiā, see *A. S. R.* for 1904-5 pp. 43 ff., for 1905-6 pp. 6 ff., for 1906-7 pp. 44 ff. and for 1910-11 pp. 63 ff.

That numerous monuments still lie hidden under débris or fields and would repay excavation cannot be denied. The site has been explored several times at considerable expense but the topographical problem still requires an indisputable solution for which further exploration seems desirable. The results arrived at would undoubtedly justify the expenditure that has been already incurred. The evidence of the copper plate I discovered last year as well as of the *Mahāparinirvāṇa* clay seals strongly favour the proposed identification of Kasiā with Kuśanagara which is further supported by the richness of the site in ancient remains. It can reasonably be assumed that further digging will throw additional light on the question. But apart from this consideration it seems necessary that at least the main site, to wit, the plot round the Nirvāṇa *stūpa* and temple as well as to the south and east sides of the large *stūpa* of Rāmābhār should be thoroughly explored and the earliest remains extant exposed and examined. That will further elucidate the history of the remains of Kasiā. The site is not only extensive but has undergone various changes during different periods of habitation and its complete examination would require excavation on a larger scale.

With these preliminary remarks I proceed to notice in detail the remains that have been exposed during this exploration.

Group of monuments round the main buildings A and B.

Buildings Q-Q'. Last year I had struck a monastic building lying towards the west of the Nirvāṇa temple and was able to open it only partially. This season it was fully exposed and I found that there were two buildings or monasteries almost identical in shape erected side by side. Apparently they are coeval. Reference to the plan will show that the foundation wall at the west is one for both the structures and the room to the south-west corner which contains a square well is a later addition. The wall found beneath the small *stupa* at the north-west corner of the structure A has proved to be distinct from these buildings (Pl. LX). As remarked in my last year's report they cannot be ascribed to a period later than the advent of the Gupta dynasty. The finds of this year consisting of the clay seals with legends written in Gupta script furnish further evidence in support of this surmise. That they were consumed by fire is indicated by burnt wood and charcoal found in quantities both in Q and Q'.

The building Q has four rooms on the west side, the one standing to the south-west corner being separated by a passage. It had two cells and a verandah on the north and three cells with a verandah on the south. Evidently it was orientated east. In Q' a northern verandah and one cell in the west are wanting. Besides this the structures in front of the rooms on the west are dissimilar. In dimensions there is some slight disparity: Q is about 48' 7" long and 39' wide whereas Q' is 46' long and 41' 9" wide. A clay seal, 1½" in diameter, resembling those of the last year with the coffin of the Buddha and the *parinirvāṇa* legend, was unearthed in Q, while in Q' two sealings bearing probably the effigy of *Hārītī* and her children and deposited in a pot containing ashes were found in the space between the western row of cells and the well noticed above. (Pl. LXIV.) The latter would show the existence of a shrine dedicated to the said goddess. These sealings are elliptical in shape (1½" × 1⅓")

and bear the marks of string at the back. The name of *Mahāparinirvāna* is written partly above and below the effigies. To find such seals here is significant for after the testimony of the seals of the *Mūlagandhakūṭi* at Sārṇāth it can reasonably be assumed that the *Mahāparinirvāna* seals also belonged to the place where they were excavated. Both the wells, the one just alluded to and the other lying close by towards the west were examined, the latter only partially. Beyond some glazed pottery the former yielded nothing. It is fed by a spring rising from the east, the water being remarkably pure and refreshing.¹ The latter recompensed my labour by some sealings of different types of about the Gupta period. They are mostly fragmentary. The best preserved ones have a circular area ($\frac{3}{4}$ " in diameter) inscribed with the legend—*Śrīmahāparinirvāna bhikṣhusaṅgha* written in late Gupta script beneath the symbol of 'dharmacakra' or 'the wheel of law' flanked by two couchant deer.

Excavation was continued southward of these buildings and a platform found which starts from a distance of about 3 feet from Q' and extends up to 42 feet where it abruptly breaks off. Evidently it is earlier than the Nirvāna temple for it goes below that structure. From the top of the plinth of the latter it is nearly 4 feet lower and extends 22 feet westward.

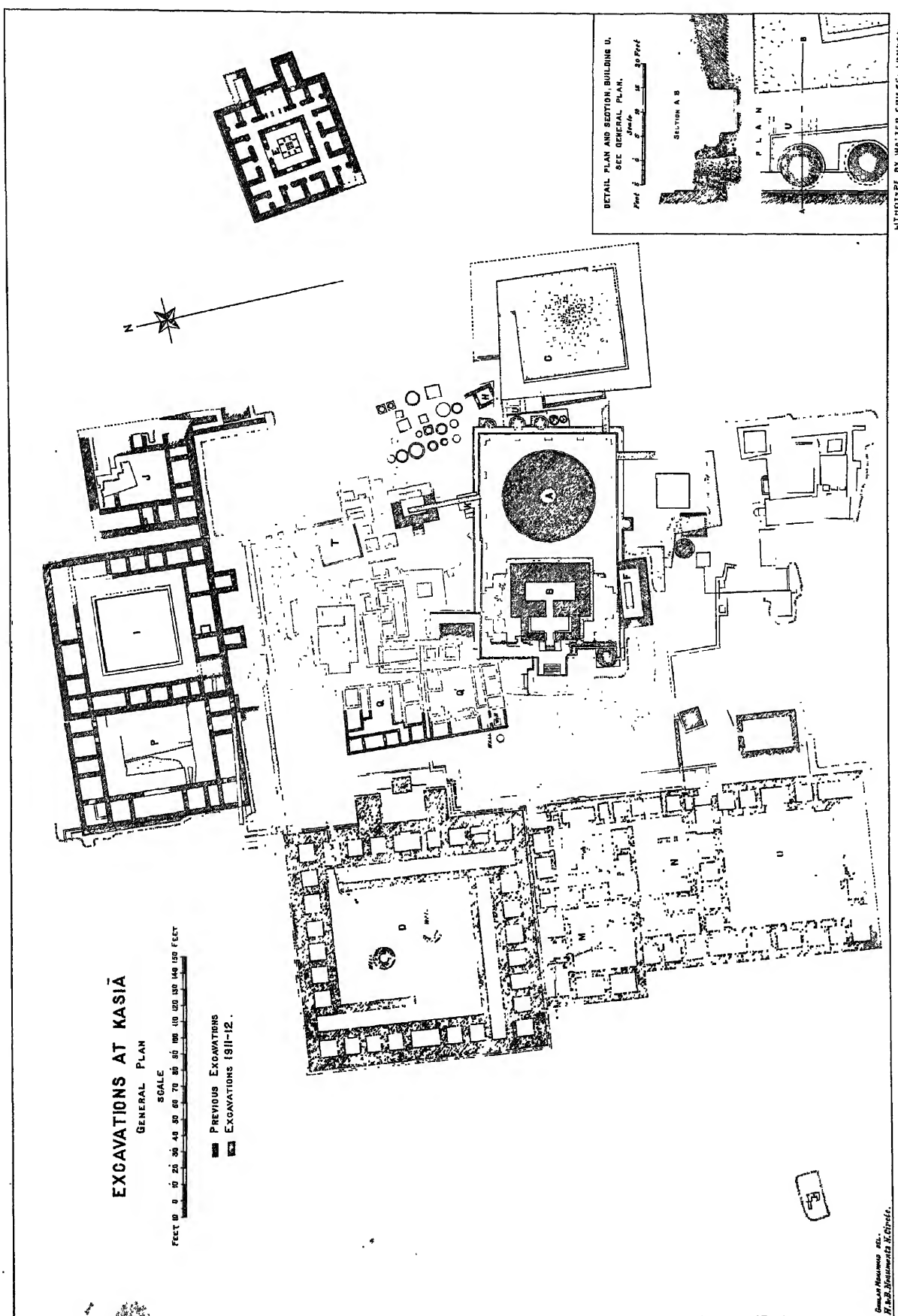
The *stūpa* engaged in the plinth of the Nirvāna temple near the south-west corner, as will be seen from the general plan published above, was examined by driving a shaft at its centre but digging was discontinued when an earthen pitcher full of clean and cool water containing some ashes, apparently corporeal remains, together with some metal pieces was found at a depth of about 4 feet from the top.

Buildings V and W.

With a view to trace out the wall found beneath the small *stūpa* which stood to the north-west corner of the Nirvāna temple I drove a trench along it towards the north and another towards the west at a distance of 20 feet from Q. Both these diggings led me to the remains of several buildings of considerable antiquity (Pl. LXI.) Those which lie to the north-east of Q are, on account of their higher level, comparatively late in origin and may be relegated to about the tenth century A.D. The real character of the wall in question could not be ascertained for it is not only detached but is broken at the south side. Presumably it continued southwards and was connected with buildings hidden under A. At the spot where it ends abruptly digging was carried downwards. This led to the exposure of the remaining part of the ornamental plinth round the main building at the north-west side but had to be stopped when water began to find its way into the excavations. A number of square bricks of the Mauryan period found here apparently indicate the existence of some very early structures that have now disappeared. Attached to this wall I opened three distinct rooms one of which measures 25'-9" long and 16'-6" wide and the other two 9'-6" × 9'-10" and 10'-4" × 10', externally. The former contains a platform (5'-3" × 6') with a rectangular pit (2'-7" × 1'-5"), apparently meant for

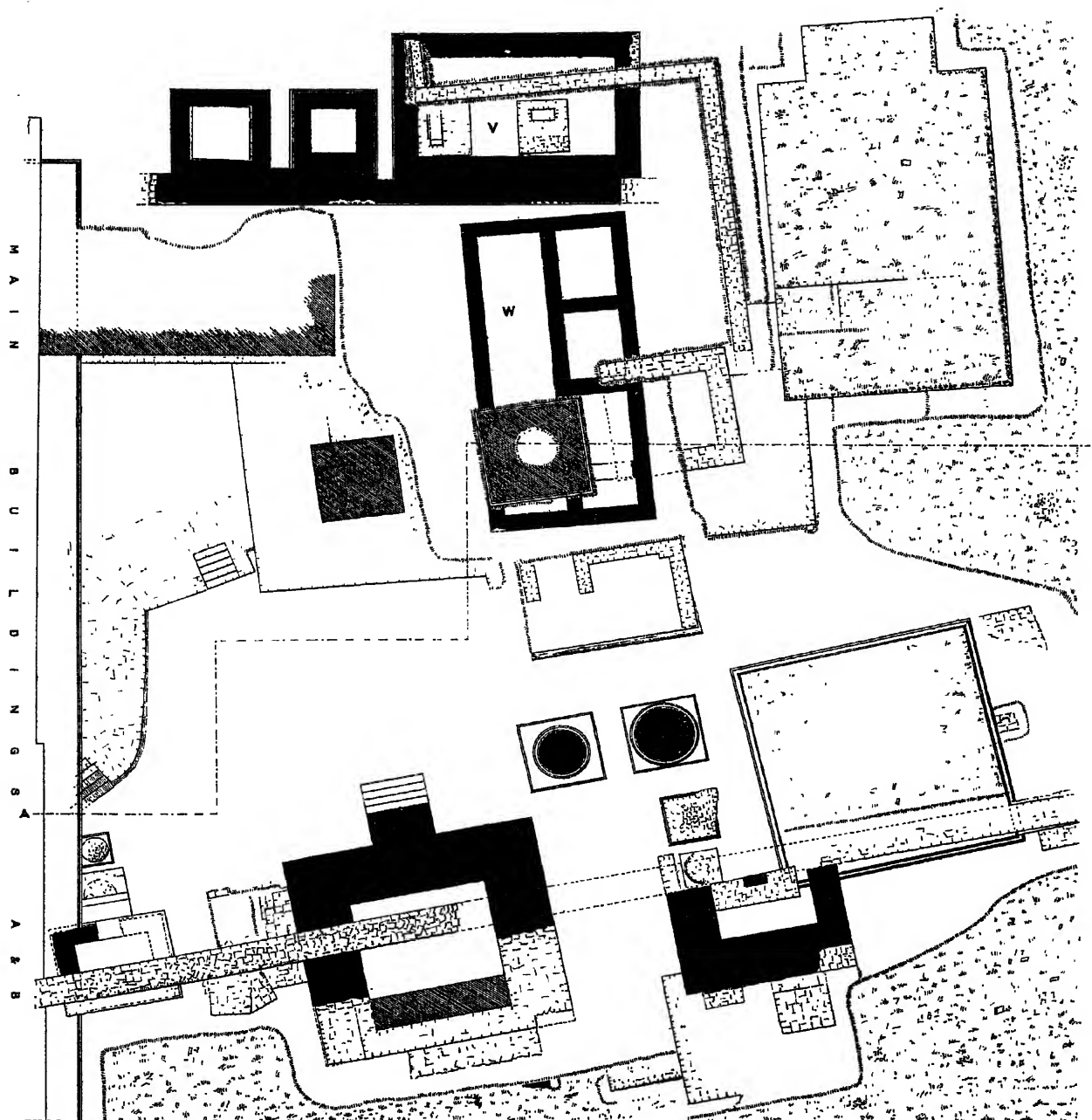
¹ This will remind one of Hsuen Tsiang's statement about a well at Kuśānagar that "although it has over-flown for years and months, the water is still pure and sweet." Beal, *Buddhist Records of the Western World*, Vol II, p 32.

EXCAVATIONS AT KASIA.





EXCAVATIONS AT KASIÄ
PLAN AND CROSS SECTION OF BUILDINGS
TO NORTH OF MAIN BUILDINGS (A&B)



SECTION A.B.

SCALE

FEET 10 20 30 40 50 FEET

Ghulam Mohd del

receiving an image, and must have been a shrine. The wall lying above it is much later and is connected with other wallings which must have formed a sort of enclosure. The nature of the remaining two is not known.

Removal of debris deposited on this part of the site brought to light many terracotta figures. (Pl. LXIV, Fig. 1.) Of these one large image which perhaps represents some female deity deserves special notice. (Pl. LXIV, Fig. 2.) It was lying, evidently not *in situ*, near the north-western corner of A opposite the two small cells which stood by the wall noticed above. The upper portion of it is unfortunately gone. It is a seated figure with left leg extended downwards as in *lalitāsana* and having an anklet on one foot. In front of the pedestal two worshippers (?) are shown. One of them with a curious and gleesome air clings to the left knee of the principal figure, his right arm passing under the left leg of the deity to take some object probably sweets or fruit held in a wide-mouthed vessel by the attendant on the opposite side—a feature which can hardly be expected in religious subjects. Both of these figures are very life-like. That to the left, excepting one arm, is entire and its drapery is somewhat similar to that found in Kushān sculpture. The head of the other image is missing. The whole figure is one block of hollow terracotta and measures about 2'-1" high and 2'-3" long.

Building IV.—Due north of the Nirvāna temple a small square *stūpa* of late origin was opened when debris was removed from above the *pucca* concrete flooring which went along the north-west side of the plinth of A. The circular shaft sunk at the centre of it led me to the basement of a monastic building which, on the evidence of its large bricks (19"×12"×4"), must have been erected about the Mauryan period. It is some 9½' below the present ground level. Externally it measures 35' long and 17'-3" wide. It has three rooms in all on the north side, two of these measuring 8' by 6' internally and the third 13' by 6'. In front of these, though the south-west side is not entirely cleared, there appears to have been a long verandah running from one end to the other. In plan, as will be seen from the drawing published above, this structure is different from the monastic buildings which have been hitherto exposed on the site of Kasīā. To the east of this building seven small *stūpas* measuring between 11' and 3½' square have been excavated and the basement of two temples, partly opened in previous years, fully exposed. Continuing my excavation southward I hit upon an extensive platform (Pl. LIX above) which goes underneath the structures A and B and appears to be connected with the platform opened in front of the Nirvāna temple that has been noticed above. From the said plinth it extends between 18' and 7' northward, and at the spot where it enters the plinth it takes the form of steps of vertical bricks. (Pl. LXV, Fig. 6) Another flight of steps seen towards the north is built on to it and is apparently later. While clearing this part of the site I exhumed a number of terracotta figures, mostly fragmentary, as well as pottery, the description of which is rendered unnecessary by the illustrations accompanying this note (Pl. LXIV and LXVI.)

Excavation here yielded one fragmentary inscription which is cut on a stone. It consists of six letters and forms the genitive singular of a proper name which ends in *pāla* showing that the article, probably an image was a pious gift of the person

named in the record. The characters of this inscription are of the Gupta script of about the 5th century A.D.

To the east of the structure B some *stūpas* had been exposed during previous excavations. These are attached to the plinth and were not explored before. I attacked two of these which stand at the north-east corner and found that they concealed beneath them the remains of a very old monastic building (U) which extends towards the structures A and C. A shaft was sunk at the centre and carried to a depth of 8' from the top. This led me to a wall going east and west. A trench was then driven parallel to it which opened two distinct cells, apparently monastic. (Pl. LXI.) Their bricks resemble those of the building marked W in the said drawing and speak of the high age of the structure.

Wall K.—During previous excavations two walls were opened, one going east of the monastery D and the other north of A, *i.e.*, the Nirvāṇa *stūpa*. Though not fully traced out yet these were surmised to have formed an enclosure.¹ This year I exposed completely what was left of them. Reference to the general plan, published above, will show that the wall starting from the plinth of the said *stūpa* though broken at different places yet goes northwards at least up to a length of 145' where it appears to have broken down. A wall coming from the side of D meets it no doubt but not being in the same line appears to be distinct from the one which starts from the north-east corner of D. The difference in width of these walls though small is also significant. The wall coming from the corner of D breaks down at a distance of about 70'. The one which starts from the Nirvāṇa *stūpa* goes beyond the point where it meets the wall coming from the side of D and would thus show that it did not form any enclosure with the latter.

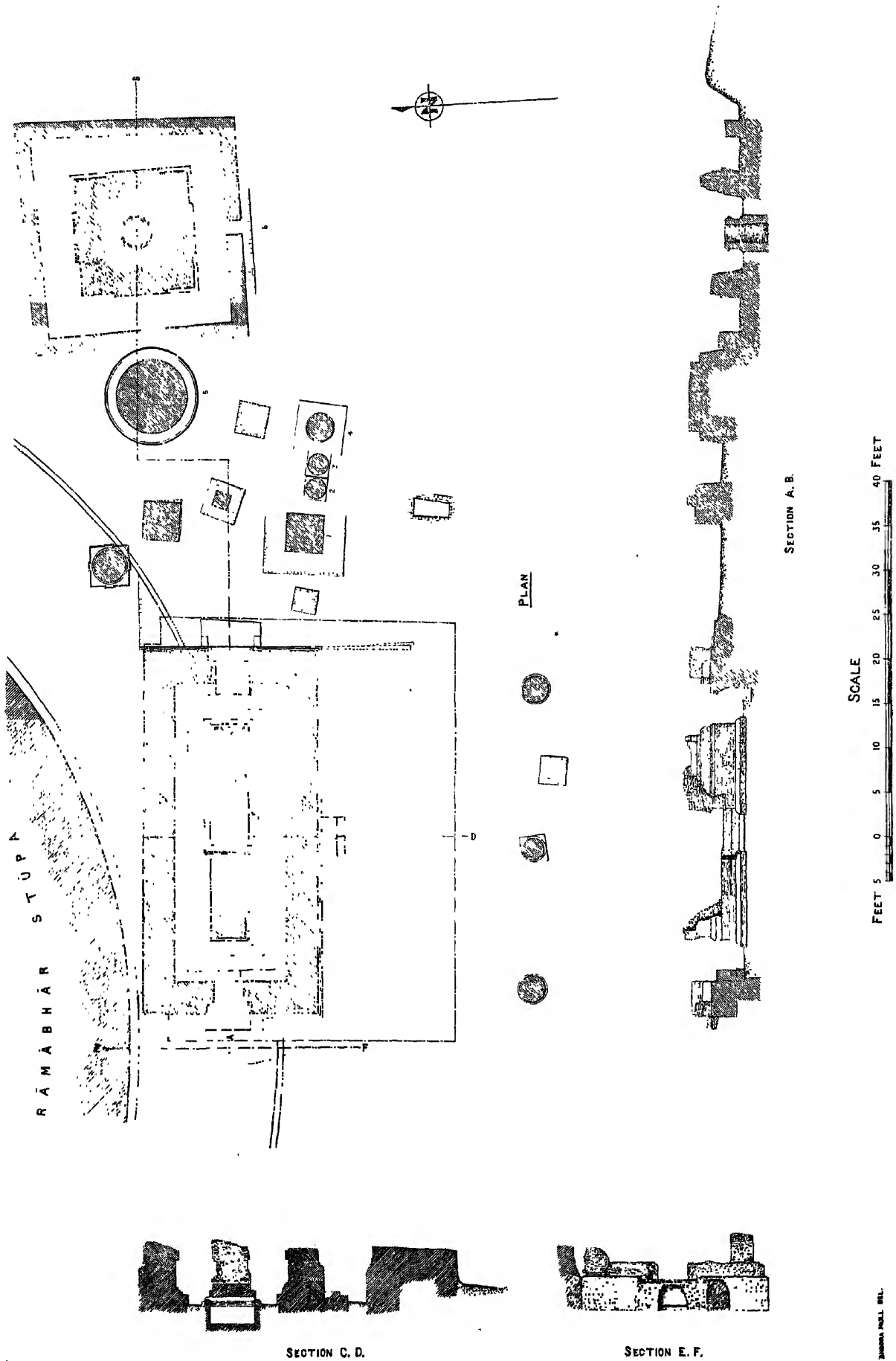
Māthā Kūār Monastery.

(Pl. LXIII.) Excavation of the monastery discovered last year to the south-west of the main site was continued and completed. At the outset it proved impracticable as, owing to the lateness of the rains, water began to percolate rapidly even at a depth of about 2'. But with the advent of the spring that began to dry and I carried on my operations with comparative facility. The whole of the remaining basement of the monastery was exposed and examined thoroughly. Some ten new cells ranging between 5' and 10' square were cleared together with the main and side entrances as well as two outer cells and platforms. The building, except the projections of the chapel and the outer cells, is square, measuring 114' externally and has the usual plan of late monasteries as has been shown in my last report. To the north-east side of the court-yard I found a circular layer of bricks which is about 17' wide. The ground within it had black mud such as is found in wells. This circumstance and the adjoining drain would indicate the existence of a well though the bricks do not go beyond some two layers.

Excavation of this monastery resulted in the finding of some iron dowels, the handle of a sword, some votive clay sealings with the Buddhist creed formula written in the script of the late mediæval period, and a copper seal bearing the legend

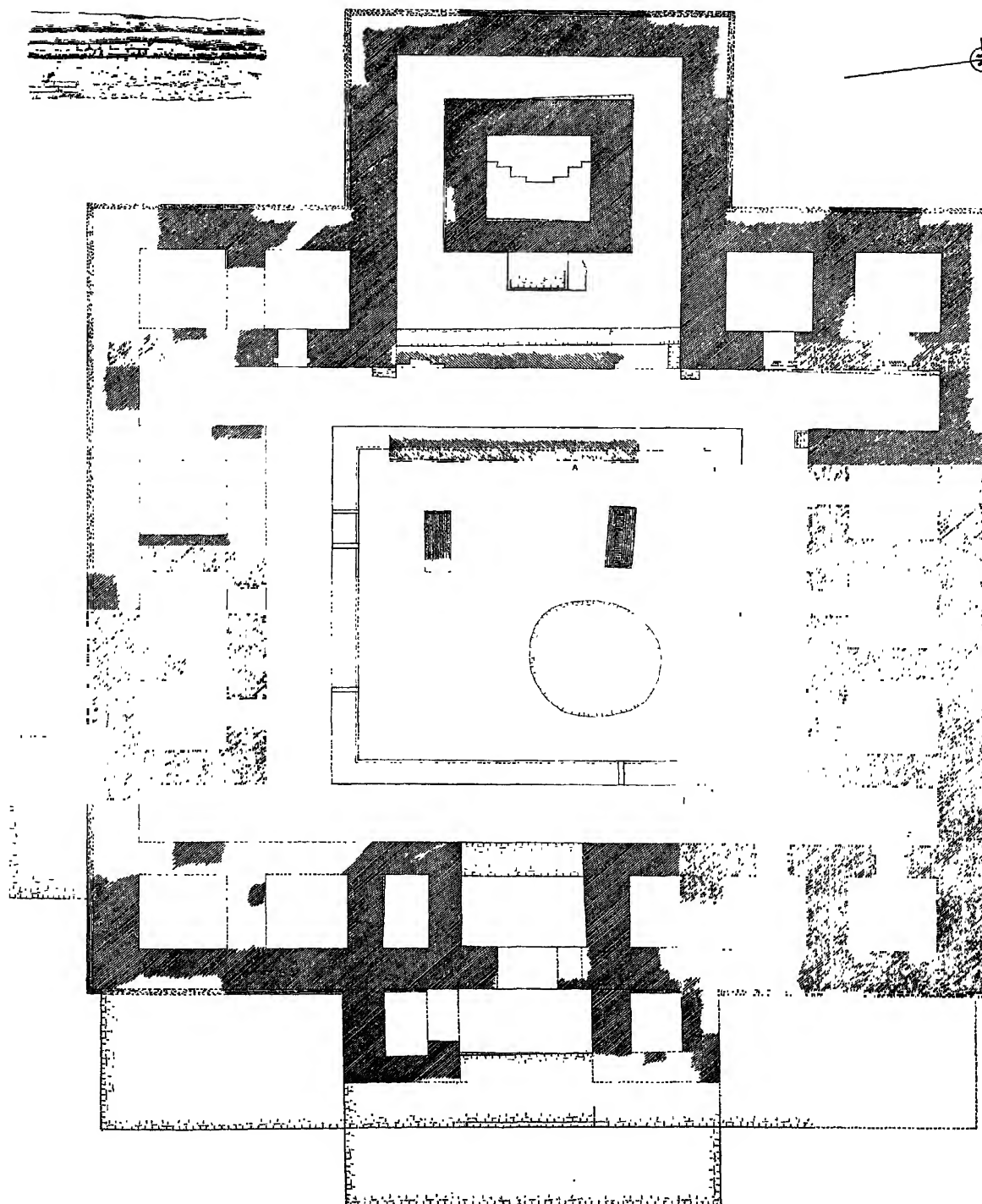
¹ A. S. R. for 1905-6, p. 65.

EXCAVATIONS AT KASIĀ—RĀMĀBHĀR



EXCAVATIONS AT KASIĀ
MĀTHĀKUĀR
PLAN

DETAIL OF WALL A



SCALE

FEET 10 20 30 40 50 FEET

Vaitakasya and a monogram incised on it. The latter was discovered from the floor of the second southern cell. It is nearly elliptical in shape (1" by $\frac{7}{8}$ "). On palæographical grounds it can be ascribed to about the sixth century A.D. and cannot have originally belonged to this monastery which, as remarked in my last report, came into existence long afterwards.

The Anrudhvā Mound.

Outside the village of Anrudhvā to the south-east of the main site of Kasiā there stood an unexplored mound which under instructions from Dr. Vogel I explored this year by driving long trial trenches more than 50' long and 8' deep. In several places water level was reached but beyond a broken pavement of bricks of late origin nothing was found. The whole mound proves to be a mass of rotten earth apparently void of any relics of yore.

To the south of this mound a plot, adjacent to the house of the village chowkidar, was attacked by Dr. Vogel in 1905-6.¹ This year I examined it thoroughly and fully exposed all the four memorial *stūpas*. With a view to examine these structures shafts were sunk at their centres and carried down to the virgin soil at a depth of about 6½'. Only two of these compensated my labour by yielding four excellent brick panels. (Pl. LXVI, Fig. 9.) One of these is nearly entire and represents the nativity of the Buddha. Another shows the Buddha in his teaching attitude, while the third bears a head with serpentine hoods behind. Apparently these tiles were used as a facing. The top portion of these memorials has disappeared; the extant buildings are about 4' high from the ground level which is some 8' lower than the present surface.

Rāmābhār.

As in the previous year the south-east side of the *stūpa* of Rāmābhār (Pl. LXV, Fig. 7) was again investigated. (Pl. LXII.) Apart from the various structural remains fourteen old *stūpas*, more or less well preserved, have been excavated this year. Of these four are almost entire (Pl. LXV, Fig. 7), three have a circular basement which is a sure sign of high age, and the rest have square bases. No. 1 has an ornamental facing and is about 6'-4" high. Excepting one (No. 5) which has a diameter of 11', all are of small dimensions. No. 6 has a rectangular enclosure round it which measures 14'-3" square and is surrounded by another which is 25'-10" long and 25' wide, and protected with a chunam coping. The latter has an entrance at the south side which is 1'-6" wide. The space between these enclosures is about 3'-10" wide and covered with chunam and concrete plaster some 6" thick. This was examined by cutting through a part of the floor near the said entrance and to the west of the inner enclosure. Digging here brought to light many votive clay seals with three *stūpas* and the Buddhist creed formula written in later script. (Pl. LXVII, Figs. 12 and 13.) It may be assumed that similar deposits will be forthcoming if the remaining sides are excavated. This *stūpa* together with one, No. 5, was examined by sinking pits which were carried down to the virgin soil but no relics could be found. The circular terrace of the large *stūpa*

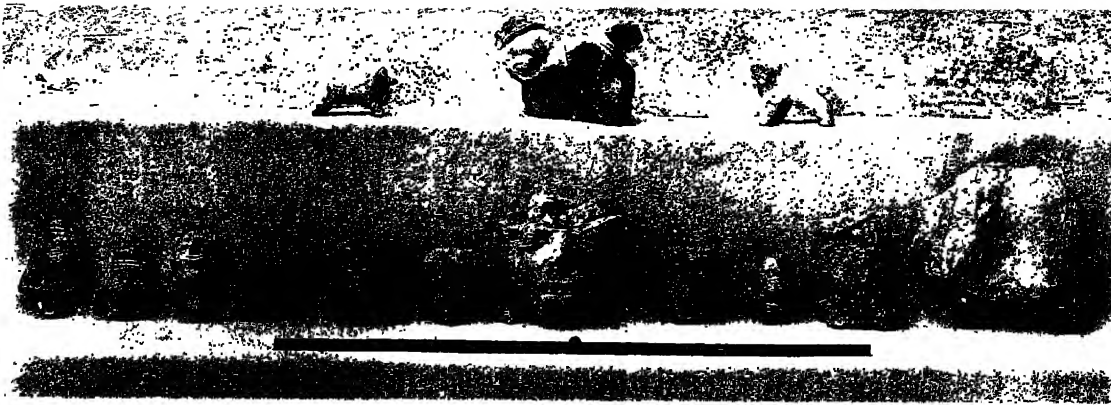
¹ A. S. R. for 1905-6, p. 76, Pl. XXVIS.

along the southern side was fully traced and exposed. Removal of debris lying here brought to light several fine ornamental bricks like those found last year. (Pl. LXVII, Fig. 14.) Besides these an inscribed stone, apparently the pedestal of a statue was discovered. The inscribed surface is about 5' by 3" and has some five lines of writing which is much worn.

Assuming that the mysterious structure, exposed last year towards the south of the large *stūpa*, was erected on the remains of some earlier building, I cut open the strong thick plaster and hit upon a wall going east and west under it. This was followed up and still more mysterious structures were traced out. An idea of their appearance may be formed from the photograph and drawing here published. The latter, I believe, will replace a detailed description. The nature of these buildings is far from clear and even to hazard a conjecture is impossible. Excavation here has been tantalising as the plot could not be thoroughly explored. Still it can reasonably be assumed that further exploration will reveal the true character of these structures and may throw light not only on the proposed identification of the locality with *Mukula-bandhana*¹ but on the history of the place as well.

HĪRĀNANDA ŚĀSTRĪ.

¹ Cf. my last note in *A. S. R.* for 1910-11 and Cunningham *A. S. R.*, Vol. I, p. 85, and Vol. XVIII, pp. 87 ff.



(Fig. 1). MAIN SITE: TERRACOTTA FIGURES FROM NORTH OF A & B.



(Fig. 2). MAIN SITE: IMAGE OF FEMALE DEITY (FRONT) FROM NORTH OF A & B.



(Fig. 3, 4, & 5.) MAIN SITE: CLAY SEALINGS FROM Q AND Q'.



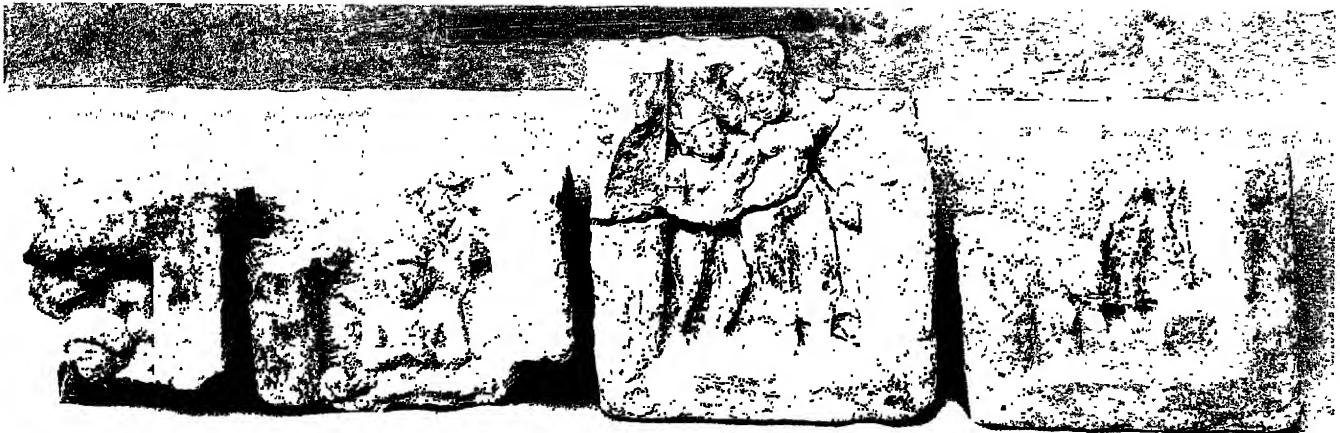
(Fig. 6.) MAIN SITE: STEPS OF VERTICAL BRICKS FROM NORTH OF A & B.



(Fig. 7.) RAMABHAR: GENERAL VIEW OF EXCAVATIONS, FROM S.E.



(Fig. 8.) MAIN SITE: FRAGMENTARY TERRACOTTA FIGURES FROM NORTH OF A & B.



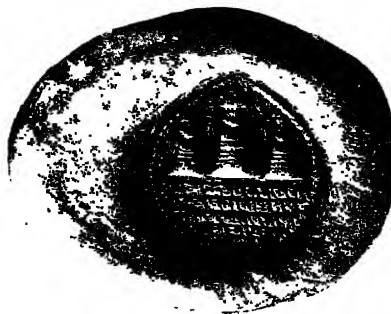
(Fig. 9.) BRICK PANELS FROM ANRUDHVA MOUND.



(Fig. 10.) MAIN SITE: POTTERY FROM NORTH OF A & B.



(Fig. 11.) RAMABHAR: OLD STUPAS, SIDE VIEW.



(Figs. 12 & 13.) VOTIVE CLAY SEALINGS WITH THREE STUPAS AND THE BUDDHIST CREED FORMULA.



(Fig. 14.) RAMABHAR: ORNAMENTAL BRICKS.

EXCAVATIONS AT HMAWZA, PROME.

THE previous Reports of Mr. Taw Sein Ko, and especially what he has written in the Annual Report, Part II, of the Archaeological Survey of India for 1910-11, make clear the objects he had in view in excavating at Hmawza in the Prome District. The principal of these objects was naturally to try and find data for pushing back, if possible, the period of authenticated Burmese history beyond the 7th century A.D. Another important object was to secure additional evidence regarding the now extinct (and provisionally called) Pyu language; and it is principally with these two objects in view that the excavations were resumed during the cold season of 1911-12, in the course of which the finds forming the subject of this note were brought to light.

In the Annual Report, Part II, for 1911-12 reference is made to two fragments of an inscription which were discovered while clearing the terraces of the Baw baw gyi pagoda from the debris that encumbered them. This year, the most important find, both from the epigraphical and historical point of view, made at the same pagoda, is another inscribed fragment of soft stone which forms the central piece of the two referred to above. These three fragments (Fig. 1, Pl. 1) have been pieced together by M. L. Finot of Paris, who reports on them in the following terms :—

“A few weeks ago, my friend Mr. Blagden sent me the *estampage* of an inscribed fragment found at Hmawza, desiring me, on your behalf, to try and decipher it. I did my best to comply with his request, rather hurriedly. But then he called my attention to two other fragments discovered before on the same spot, which he thought might, perhaps, help to the elucidation of the new one. This suggestion proved very happy. Put side by side, the three fragments turned out to tally perfectly well and give a running text. This text I tried to find out in the Pitakas, but with no success. Nevertheless, Mrs. Bode has pointed out to me a passage of the *Atthasālinī*, which, though different from the Hmawza text, is clearly akin to it and has helped much to the right understanding of it. I send you my transcription which, I hope, proves beyond doubt the flourishing state of Pāli literature in Lower Burma at such an early date as Vth and VIth century (for, as to date, I quite endorse your opinion).”

Transcription of the Pāli fragments found at Hmawza.

The three fragments found at Hmawza contain a Buddhist text in Pāli. Whether it is extracted from the Suttapiṭaka or from the Abhidhammapiṭaka or perhaps, from an Aṭṭhakathā, is not clear. The writing may be safely ascribed to the Vth or VIth century of our era. Undoubtedly the order of the fragments was as follows :—

* * * * *

Text.

(1) nā samphus (i) tattam vēdanakkhandhō saññakkhandhō saṅkhārakkhandhō.

(2) di (tṭh) i vipphanditam diṭṭhi ayam vuchchatī salāyatana (?) pachchayā phassō tattha katam (ā) phassapachchayā vēdanā iyam chota (s) i (kā).

(3) Saññōjanam gā (hō) paṭiggāhō abhinivēsō parāmāsō kummaggō.

Translation.

(1) . . . the being brought into contact, the state of having been brought into touch with. The Vēdanakkandha, Saññakkandha, the Saṅkhārakkandha (2) contest of opinion : this is called *diṭṭhi*. From the six senses springs contact. What is the feeling which springs from contact? It is mental . . . (3) . . . thus fetter (of opinion), the grip and tenacity, the inclination towards it, the being infected by it, thus by-path . . .

The discovery of this fragmentary inscription in Pāli belonging to the 5th-6th century A.D. would appear to indicate the co-existence in lower Burma at an early period, of both Sanskrit and Pāli, and therefore also that the two forms of Buddhism, the Mahāyāna and the Hīnayāna, were known in Old Prome and probably flourished there side by side, or in alternate periods of supremacy, the former view, however, being the more probable one. It is certain that, from the 11th century onward, the Hīnayāna made vast strides and finally superseded the other form; the latter, however, did not disappear so rapidly and completely as may have been thought; for it has, even up to the present day, left deep traces behind it.¹

From the same site were obtained some small bronze images of the Buddha, the most important of which are given in Pl. LXVIII, Figs. 4-6. Figure 2 (Appendix A 3) is the Buddha Dīpaṅkara; the robe is indicated merely by a line from the left shoulder passing under the right arm, thus leaving uncovered the right breast and arm, and by another running horizontally just above the ankles. The right arm, which is free from the body, is in the *Abhayamudrā*, the left hand, as is usual in these figures, holding the folds of the *uttarasāṅgha*. This traditional pose is different from that of the figure delineated on the terracotta votive tablet found at the Western Petleik Pagoda, Pagan, in which both hands are raised to the shoulders with the palms outwards. It has some similarity with Fig. *a*, Pl. XXIX of the

¹ See *Journal of the Burma Research Society*, Vol. 11, Part 1, June 1912, pp 101-03.

Annual Report of the Archæological Survey of India, Part II, 1906-07,¹ but where the attitude is much more natural and graceful; the attitude in our statuette is very stiff. The feet are placed close to one another and the fleshy protuberance of the head, instead of ending in one knob, has two, the top one being pointed in the shape of a cone or *rāsmīmāla* as it is called in Ceylon; there is no trace of a halo; the cast of countenance is frankly Indian. It is somewhat difficult to determine the age of this figure, for there is nothing distinct to base an opinion upon, except perhaps the sharp Indian features; but the style of the figurine as well as its being found at the Bawbawgyi not very far from the Avalokiteśvara described below, point to at least the 10th-11th century. Figure (5) is a Buddha seated on the *padmāsana*; the figure is seated cross-legged with the sole of the right foot upwards; the left hand rests on the lap in the *dhyāna-mudrā*, and the right is hanging, palm inwards, in the *bhūmiśparśa-mudrā*. The upper robe, folded on the left shoulder, leaves the right shoulder and arm bare; the *uśhānīśha* assumes the conical pointed shape. The back of the pedestal, on which is the lotus throne, is elaborately decorated. There is, on each side and facing sideways, a leogryph standing on its hind legs on the back of a diminutive elephant and supporting the head of a *makara*. From the jaws of each leogryph there flows a string of pearls which it holds between its fore paws and which falls nearly to its feet. From behind the head of each *makara* there issues the usual florid tail which, gracefully curling up enters, on both sides, the jaws of a *kirtimukhī* with large goggle eyes and stylized horns, a head somewhat similar to which may be seen in Fig. 14, Pl. LXV, Archæological Survey of India, Annual Report, Part II for 1903-04. The whole is surmounted by a small *hti*. Just in front of the lotus cushion, on the top of the throne, there is a small thunderbolt, or *vajra*.² The elaborate design of the back of the throne, and the Mongolian appearance of the face with its rather flat nose and slightly almond eyes seem to indicate that this figure is not of a very early date.

By far the most interesting and important find is a bronze statuette of a standing Avalokiteśvara with four arms. (Fig. 6, Pl. LXVIII.) This is the first of its kind found at Hmawza, and is an irrefutable proof of the existence at an early period, before the 11th century, of Mahāyānism at Prome. The two feet are broken off, and unfortunately also the left arm above the elbow, so that the attributes held in the two left hands have been lost; but the elaborate and high headdress in the form of a mitre, and within it, the Dhyāni-Buddha Amitābha, leave little doubt as to its being Lokeśvara. The position of the right arm of Amitābha, however, is not quite clear, and it is doubtful whether it is in the *dhyāna-mudrā*. From the disproportionate thickness of the right arm above the elbow, it appears to be raised in the *abhaya-mudrā*. The second right hand, at the back of the first, of Avalokiteśvara, holds what appears to be the book, that is, a small bundle of palm leaves tied round with a string. An interesting feature is the position of the other hand, which, instead of being, as is generally the case, in the *varada-mudrā*, is here

¹ Cf. also A. Foucher's *Iconographie Bouddhique de l'Inde*, Vol. I, page 75, and *L'Art Greco-Bouddhique du Gandhara*, Vol. I, pp. 275, 277.

² It is similar in form to that held by Padmasambhava, Fig. 35, Grunwedel's *Mythologie des Buddhismus in Tibet und der Mongolei*; cf. also Sylvain Lévi, *Le Népal*, 11, p. 17.

brought up before the shoulder in the *vitarka-mudrā*.¹ The right knee is slightly bent, causing the left hip to protrude slightly and gracefully, as is so often seen in the Gandhara statues of the Buddha. The forehead is marked with the *ūrṇā*. The dress is that usually worn by Bodhisattvas, with necklace, armlets, girdle and below the latter, running across the loins, a sash, tied in a graceful knot on the left hip and falling all along the left leg. The whole figure is exquisitely worked. It is probably not later than 6th-8th century.² For the last few years indisputable proofs of Indian culture and direct intercourse with Burma in early times and extending over a long period have been slowly accumulating, and the new material bids fair, if similar finds continue to be made and more ancient inscriptions than are now at our disposal be found, to enable us, within a few years, to carry back the history of Burma, both political and religious, to the early centuries of the Christian era and probably earlier still.

Among the terracotta tablets discovered at the Bawbawgyi pagoda, there is a fragment bearing a Sanskrit legend (Fig. 2, Pl LXVIII) which was submitted for examination, to Mr. Venkayya, the late learned Epigraphist, who wrote as follows: "I have again spent some time over the votive tablet. The result is, however, not very encouraging as I am still not quite sure of the reading. But it now seems to me that the most probable reading is: *Machchhakadānapati-Vigahā-rājā-śrī*. There is one more symbol at the end of the line, which is partially damaged. It is also possible there are more letters or symbols lost. If the former is true, it may be assumed that "Machchhakadāna" was the name of some locality, town, province, or kingdom. Its ruler would, in that case, be Vigahā-rājā, though one would, under ordinary condition, expect the syllable *śrī* before the name and not after it." Neither the locality "Machchhakadāna" nor its king "Vigahā-rājā" has yet been identified. Both names appear to be foreign to Burma

APPENDIX A.

List of Finds from the Bawbawgyi Pagoda.

I Inscriptions

1 Inscribed fragment of soft stone, consisting of three lines, the longest being four inches in length (see above, pp. 142-143).

II Coins.

2. Five silver coins (see p. 90 of the Annual Report of the Archaeological Survey of India, Part II, for the year 1910-11)

III. Bronze Figures.

3. Figure (ht 7' 7") of Buddha standing (see above, pp. 143-144)

4-7 Figures (ht. 4' 9", 4' 5", 4' 4" and 3' 7" respectively) of Buddha seated cross-legged in the *Bhūmisparśa-mudrā*

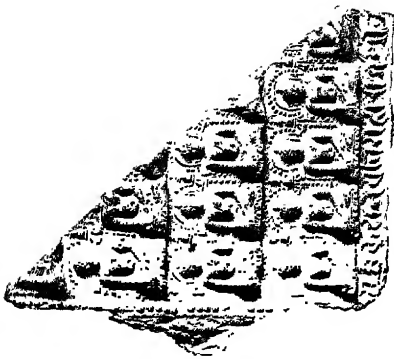
¹ Cf. *Iconographie Bouddhique*, Vol I, 98 and Note 2

² For the Bodhisattva Maitreya in Burma, see *Journal of the Burma Research Society*, Volume II, Part I, June 1912, page 101.

EXCAVATIONS AT HMAWZA, PROME.



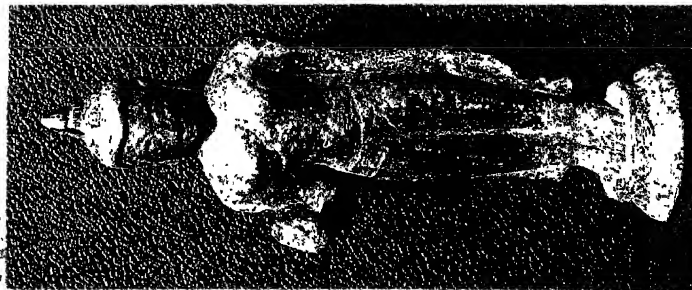
(Fig. 1.) FRAGMENT OF AN INSCRIPTION FROM HAWBAWGYI PAGODA.



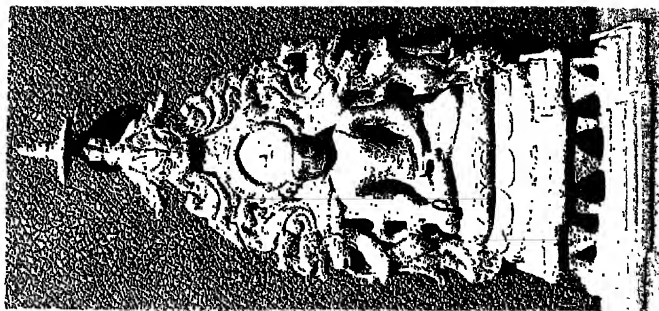
(Fig. 2.) FRAGMENT OF A VOTIVE TABLET.



(Fig. 3.) FUNERAL URN IN STONE.



(Fig. 4.) DIPANKARA.



(Fig. 5.) BUDDHA.



(Fig. 6.) AVALOKITESVARA.



(Fig. 7.)



(Fig. 8.)

(Figs. 7 & 8.) STONE BASINS OR TROUGHS FROM PHIKTHANOMYO.

8-9. Figure (ht. 2' 7" and 2' 5") of Buddha seated cross-legged on a lotus throne, with its left hand placed on its lap. The right hand rests with its back on the knee, holding a fruit. Opinions in Burma differ as to the meaning of this posture and the event in the Buddha's life which it is intended to represent; but I think it may be explained by a passage in the Mahāvagga found in the story of the conversion of Uruvela Kassapa and his thousand jaṭilas. It runs: *Atha Khō Uruvelakassapō jaṭilō tassā rattiyā achchayēna yēna Bhagavā ten' upasāṃkamī, upasāṃkamīvā Bhagavatō kālaṃ ārōchēsī: kālō, mahāsamana, niṭṭhitaṃ bhattan ti. Gachchha traṃ Kassapa, āyāma' ahaṇ ti Uruvelakassapaṃ jaṭilaṃ uyyōjetvā yāya jambuyāyaṃ Jambudīpō paññāyati, tatō phalaṃ gahētvā paṭhamataraṃ āgantvā aggāgārē nisīdi . . . etc.*¹

"Then Uruvelakassapa, the jaṭila, at the end of that night went where the Bhagavā was; having approached him, he announced to him that it was time, saying "It is time, great samana, the meal is ready." "Go you, Kassapa, I will follow you." Having thus dismissed Uruvelakassapa, the jaṭila, he went to the Jambu tree which has given its name to this continent (India) and plucked a fruit thereof; then, arriving before Kassapa he sat down in the room in which Kassapa's sacred fire was kept."² From this it may be inferred that the fruit held in the right hand is the Jambuphalam.

10. Figure of Buddha (ht. 2' 8") seated on a throne with back (ht. 8' 2") (see above, p. 144).

11. Figure (ht. 3' 7") of Buddha seated cross-legged in the *Bhūmisparśa* attitude on a throne. It is gilt and has a halo which has broken and has been detached from the main figure, and of which about one-half only, in two pieces, has been found. In the centre of the larger piece, in an oval formed by small dots, are three lines of inscription very much defaced and indistinct, but from one or two letters a little less damaged than the others, the alphabet seems to be in the Nāgarī script.

12. Figure (ht. 8") of a standing Avalokiteśvara with four arms, the left arm broken off above the elbow; the two feet are missing. (See pp. 144-145 above.)

IV. Terracotta tablets

13-51. Tablets in the shape of a circular seal (diam. 1' 8") bearing the figure of Buddha seated cross-legged in the *Bhūmisparśa* attitude on a lotus throne. On each side are three little dots; but the image is much defaced, and it is impossible to distinguish what the dots were intended to represent. The whole figure except the throne is enclosed within three layers of oval shaped rings.

52-54. Oval shaped tablet pointed at one end (length 2' 5", breadth 1' 6") bearing the figure of Buddha seated cross-legged in the *Bhūmisparśa-mudrā* on a lotus throne. From the body issue forth, all round, flames of fire. This no doubt represents the second of the miracles performed by the Buddha for the conversion of Uruvelakassapa (Vinaya Pitakam, Vol I, p. 25). In the room where Kassapa kept his sacred fire there was a very powerful and venomous serpent (nāga) which, Kassapa was fearful, might harm the Buddha; but the latter entered the room, sat down and made flames issue from his body (*Bhagarūpi teṣodhātum samūpajjīvū pajjale*).³

55-70. Figure (ht. 3") of Buddha seated on a lotus throne cross-legged with the left foot, sole upwards, on the right one; in the right hand he is holding an alms-bowl, and the left hand rests on the knee; the left arm and shoulder are uncovered; at the back, a shrine.

71-151. Oval-shaped tablet (5" × 4.5") bearing the figure of Buddha seated cross-legged in the *Dharmachakra-mudrā* on a lotus throne with the back. Two prancing leogryphs, one on each side of the Buddha and facing sideways, support the spandril of the back of the throne. Below the figure there are three lines of inscriptions, but they are much defaced and are quite unintelligible.

152-236. Oval-shaped tablet (3.5" × 2.7") bearing the figure of Buddha seated cross-legged in the *Dharmachakra-mudrā* on a lotus throne with back. The back of the throne is decorated with makara heads which are supported by leogryphs standing on couchant elephants, each holding a lotus flower by its stalk in its trunk. The leogryphs are facing outwards.

¹ See the *Vinaya Pitakam*, edited by H. Oldenberg, Vol. I, 29 in fine.

² Cf. *S. B. E.*, Vol. XIII, 227.

³ Cf. also, *S. B. E.*, Vol. XIII, p. 120, *Mahāvastu*, Vol. III, 429.

237-253. Oval-shaped tablet (3·8" × 2·8") containing the figure of Buddha seated cross-legged with the left hand placed on its lap and holding an alms-bowl, and the right hand pointing towards the earth, on a lotus surmounting a throne. The figures in the niches of the throne are absent. The *uttarasāṅgha*, or upper robe, leaves the right shoulder bare and is beautifully draped, reminding one of the Gandhara figures. The Buddha is crowned by a *hiti*, and the back of the throne is ornamented with the usual device—Makara head supported by a leogryph standing over a rampant elephant which is holding a lotus bud by its stalk in its trunk. The leogryphs are facing outwards. A little above the leogryphs is the figure of a deva kneeling, with the hands clasped together, and worshipping the central figure.

254-340. Oval-shaped tablet (3·8" × 3·4") containing the figure of Buddha seated cross-legged in the *Dharmachakra-mudrā* on a lotus throne with back. Buddha is flanked by a lotus bud resting on its stalk which issues forth from behind the knee.

341-345. Oval-shaped tablet (2·6" × 2·1"). In the upper half and in the centre is Buddha seated cross-legged in the *dhyanā-mudrā* on lotus throne with back, and is crowned by a *hiti*. It is flanked on either side by a figure with crowned head also seated cross-legged on a lotus. The left hand of the figure on the proper right, and the right hand of that on the proper left, of the Buddha, are brought up before the chest, while the other hand is resting on the lap, with the palm inwards, and on the left knee, respectively. On the outside of each of these two figures and close to the rim of the tablet is a small *chakṛa*. In the lower half and in the centre is a throne which may be identified with the lion throne from the two small figures of lions in a sitting posture. It is supported on a lotus flower and flanked by two devas in the attitude of adoration also seated on lotus flowers, and by two small stupas also placed on lotus flowers, the stalks of which spring forth from beneath the lion.

346-392. Oval-shaped tablet (3" × 2"). The figures represented are the same as those on the tablets numbered 341-345 with the following difference. In the upper half, and in the lower half the two small stupas, are absent. Between the pilasters of the lion throne there is a circular figure—stamped—which cannot be well identified, being too much worn away, but it is not that of a lion. Below the lotus flower which supports the lion throne there is a figure of which only the two forelegs are visible.

393-422. Oval-shaped tablet (3·7" × 3") containing the same figures as depicted on the tablets numbered 152-236; but the leogryphs are facing in the ordinary way, *i.e.*, sideways.

423-425. Oval-shaped tablet (4·5" × 3·6"). It is divided into three panels. In the uppermost panel, the central figure is Buddha seated cross-legged in the *Dharmachakra-mudrā* on a lotus throne. Buddha is flanked on his left side by two figures which, from their headdress, appear to be Bodhisattvas, and on his right, by two monks, all in the attitude of adoration. In the middle panel there is a symbolical wheel in the centre, flanked on its left by three figures which appear to be those of Bodhisattvas, and on the right by three monks in the same attitude as the ones above them. In the lowermost panel are deer in a forest.

426. Fragment of an inscribed terra-cotta tablet (see above pp. 142-143).

V. Funeral urns.

427. Fragments of an earthenware vessel containing star-shaped golden flowers, a golden ring and a bead, mixed with earth and charred bones.

APPENDIX B.

Other excavations at Hmawza.

Besides the Bawbawgyi Pagoda, excavations were undertaken at several other sites at Hmawza, but none of them yielded any interesting results, except in the neighbourhood of the Payagyi Pagoda, which forms a triad with the Bawbawgyi and Payama Pagodas.

"Two funeral urns in stone, with Pyu legends inscribed on them, were found at a distance of 210 feet to the south of the Payagyi Pagoda, at Hmawza. They are not of the same size. The bigger one measures three feet one and half inches in height, and one foot and ten inches in diameter. The smaller one measures two feet one inch in height, and one foot and five inches in diameter. The stone of which the urns are made, is hard and close grained, is of a grey colour, and is not found in the neighbourhood. The bigger one is on the left of the smaller, the left according to the Chinese being the side of honour. The bigger appears to have been rifled before, and contains nothing but red earth. The smaller contains white pebbles, bone-ash, and red earth. The urns apparently contain the ashes of a king and his queen. It is a curious custom, which is similar to that which is in vogue in Christian countries, of turning the sacred precincts of a pagoda into a cemetery. Both the urns are inscribed with legends in the Pyu character; and estampages of them were sent to Mr. C. O. Blagden, London, who has furnished this office with preliminary reports. He says that the new Pyu find is very important. Each inscription begins, after an introductory punctuation flourish, with the words *tāa : ba* : meaning apparently "Sovereign Lord," or as we should say, "His Majesty the King." The name of the legendary Duttabaung of Śrī Kshetra may possibly be no more than the Pyu title in question. In the first part of each inscription occur the syllables *Vi kra ma*. These must be either part of the royal name or a reference to the *Vikrama* era. At present, there is little prospect of making a complete interpretation of both epigraphs, but if a few more such urns were found, the variants would, perhaps, enable us to see what was "common form," and what was individual statement of date, age, length of reign, name, and the like. One definite result seems, however, to emerge from the latest find (taken together with the previous ones in the same script). The language, whether we name it "Pyu," or what we please, which is used in these inscriptions, was a language of the district of Prome, and the language in which the ruling chiefs of that region had their funeral epitaphs set up. That is now an established fact; whereas, on the previous evidence alone, it was merely a reasonable hypothesis. In other words, prior to 1,000 A.D. there was between the Talaing states of the Delta and the Tenassarim side on the one hand, and the Burmese state of Pagan on the other, a third intervening nation with its centre at Prome, which was neither Burmese nor Talaing, but probably distantly related to the Burmese and representing an earlier wave of Tibeto-Burman immigration from the far North. It received its Hindu culture through the Talaings of the Delta, but for some centuries managed to keep itself practically independent of both its neighbours north and south, though it seems to have been occasionally overrun by the Talaings. The ancient floating "legends of an old kingdom at Prome" are, therefore, confirmed in a most remarkable manner by the epigraphic evidence now brought to light. Having regard to the very archaic characteristics of some of the letters of the "Pyu" alphabet, it would not be surprising if Indian civilization had reached Prome in the first, second or third century A.D.

"About a hundred years ago, King Bodawpaya ordered lithic inscriptions from various parts of the country to be collected at Amarapura. In that collection, an epigraph in the "Pyu" character was found, and estampages of it were submitted, for examination, to the Government Epigraphist and Mr. C. O. Blagden. The former scholar has replied as follows:—

"I have studied the impression and the photographs very closely and find that the language is foreign to me. The alphabet is, however, Indian and reminds one of the two inscriptions of Mahāniputa Purisdata from Jaggayapeta (in the Kistna District) published in Dr. Burgess's *Buddhist Stupa of Amaravati* and *Jaggayapeta*, page 110 and Pl. LXII and LXIII. The inscription may belong to about the fourth century A.D. Thus, the writing is older than the Maunggun-gold plates assigned to the fifth century A.D. Both these records form an important link in the history of Burmese script, and it is interesting to note that the writing in both of them resembles the alphabet used in the Telugu country in the ancient time." It is a remarkable fact that the "Pyu" script has some affinity to ancient Telugu. Most probably, the "Pyu" received their letters, religion and civilization mainly from the Dravidians of the Telugu country.

"Near the outskirts of Peikthanomyo and also within the limits of the Pyudaik at Hmawza,

were discovered six stone basins or troughs (Figs. 4 and 5, Pl. II). They are fashioned out of some igneous rock which is not found in the neighbourhood or country itself. It is a dark blue in colour, is hard in texture, and is very close grained. Each basin is made up of two parts: the upper, which is circular, and is shaped like the inside of a Buddhist alms-bowl, and the lower, which is octagonal in form, and measures one foot and eight inches across. Each side of the octagon is two feet in length. There is a neck supporting the basin, which is six inches in height and two feet in diameter. There are no stands or plinths attached to the basins: they rest immediately on the bare ground. The problem for solution is the probable use to which these basins were put. They could scarcely have been used as receptacles of offerings made to the image of the Buddha, because they are not placed on an elevation, and because there are no remains of pagodas or temples in the vicinity. Nor could they have been used for the storage of water for drinking or bathing purposes either for men or beasts, because their capacity is extremely limited. The remarkable fact is that these basins are found in pairs, and are placed side by side. If they are not used in the Buddhist worship, could they have been connected with Hinduism? Could they have been dedicated to the use of the Hindu deities Siva and his consort Kali, or Vishnu and his consort Lakshmi? Mr. Taw Sein Ko is inclined to think that these huge stone basins formed, at one time, part and parcel of a Hindu temple, which being built of wood, has disappeared. The Hindu gods are supposed, at stated time, to retire to sleep, to get up from bed, and to perform ablutions. Could these basins have been used for the ablutionary ceremonies of the Hindu gods?"¹

APPENDIX C.

List of Finds at the other sites of excavation at Hmawza.

VI. *Finds from the Payagyi Pagoda.*

- 428-429 Funeral urns made of stone discovered at the South side of the Payagyi Pagoda (see above p. 145).

VII. *Finds from Pyudaiik.*

- 430-437. Bricks with marks on them.
438. Jaw bones of a cow or a bullock.

VIII. *Finds from the Myaukzegu Pagoda.*

- 439-440 Bricks.

IX. *Finds from the Kyunbington near the Bawbawgyi Pagoda.*

- 441-442. Fragments of earthenware funeral urns containing charred bones found mixed with earth

X. *Finds from the Tebingon near the Bawbawgyi Pagoda.*

443. Lid of earthenware funeral urn.

CHAS. DUROISELLE.

¹ Report of the Supdt., Archæological Survey, Burma, for the year ending 31st March 1912, pp. 11-13.

THE HLEDAUK PAGODA AND ITS RELICS.



(Fig. 1.) FUNERAL URN
IN STONE FROM THE
BAWBAWGYI PAGODA,
HMAWZA.



(Fig. 2.)
SMALL STUPA
PLATED
WITH SILVER.



(Fig. 3.) THE SAME,
WITH SIKHARA REMOVED.



(Fig. 4.) A GROUP OF FIGURES REPRESENTING THE PRINCIPAL SCENES IN THE
LIFE OF BUDDHA.



(Fig. 5.) THE HLEDAUK PAGODA, NYAUNG-GON VILLAGE.

THE HLÈDAUK PAGODA AND ITS RELICS.

THE Hlèdauk Pagoda, which is situated at Nyaung-gôn village, Madaya Township, Mandalay District, was built in 1111 A.D. by King Alaungsithu, who reigned at Pagan for 75 years, from 1092—1167 A.D. It is a square temple, each side measuring 53' 2" at the base, and was probably surmounted by a conical shaped *stūpa*, but the upper portion has crumbled down. (Pl. LXIX, 5.) During the earthquake that took place on the 23rd May, 1912, more bricks fell from the north-western and north-eastern corners of the Pagoda, and two relic chambers, one at each corner, thus became exposed. Many small figures in bronze representing the most important scenes in the life of Buddha were discovered in the relic chambers. They possess no interest from the *æsthetic* point of view, and are very rough in workmanship. At the most, they cannot be more than about 150 years old. They must have been later additions when the Pagoda underwent a subsequent repair. But among them there was found a small *stūpa* (Pl. LXIX, 2 and 3) plated with silver, the upper part of which, the *sikhara*, covers a glass vessel, hemispherical in shape and which is surmounted by two knobs, the whole being terminated by a long neck. When the *sikhara* is placed upon this vessel, the spherical part of the latter forms the bell-shaped portion of the pagoda. It is a slim pagoda with a square plinth and four subsidiary shrines of the same shape, but smaller in size, placed at each corner of the plinth. The height of the pagoda is 1' 9", and that of the glass vessel inside is 8". The chief peculiarity in the make-up of this small *stūpa* is the glass vessel inside it. The latter is unique in style and has never before been found in Burma. It is certainly of foreign manufacture and its age cannot be very great, for no glass vessels of any kind have ever been found either at Pagan or Prome. The Burmans do not seem to have known the art of manufacturing glassware, excepting round and flat beads of a greenish colour, such as have been found at Myinkaba, Pagan, and which are supposed to be as old as the 11th or 12th century. In the reliquary of the Shwe Sandaw Pagoda at Pagan have also been found elongated glass tubes about one or two inches in length and a quarter of an inch in diameter, similar to those with which screens are made. The Shwe Sandaw goes back to the time of Anawrata (11th century A.D.) and this art in Burma practically stopped at that. In this glass vessel were found many seed-like little things which pious Buddhists assert are relics of Buddha. The floral design round the plinth,

which is similar to that found on the walls of many old buildings at Pagan, is no proof of the antiquity of this miniature pagoda, and was probably made in imitation of the floral designs at Pagan. This reliquary is, therefore, a late addition to the relics of the Hlèdauk pagoda offered by pious persons. The design round the plinth is rather rough in workmanship, and is not symmetrical; this can be accounted for by the fact that the towns and villages in the neighbourhood of Mandalay, the seat of the last kings of Burma, were situated on the borders when Pagan was flourishing, and it was scarcely possible to find a neat and careful silver-smith at such a place as Madaya, which is many miles to the north of the old capital city of Burma.

The other figures referred to above are less important, but they are not devoid of interest. Some similar to them had already been found at Shwebo by Mr. Taw Sein Ko in 1903, and were described by him in the *Archæological Survey of India Annual Report for 1903-04*, pp. 145 ff. I shall therefore describe shortly only those not included in Mr. Taw Sein Ko's paper, or the designs of which differ sensibly. (Pl. LXIX, 4.) The group on the extreme left of the upper row (No. 1) represents the Buddha Dipaṅkara followed by some *Arahats* and predicting to Sumedha, who had thrown himself on the ground, that the Buddha might not soil his feet, that he would, in times to come, become the Buddha Gotama. Then are seen (No. 2) the twenty-eight Buddhas. On the extreme right of the same row, is the scene of the Bodhisattva's birth in the Lumbini Grove — to the left, Mahā-Māyā holding the tree with her right hand, and her sister Mahāprajāpatī assisting her, and, in front of Mahāprajāpatī, the child making his first seven paces.

On the left, in the second row, the Bodhisattva is going to his pleasure garden in the royal chariot; the next four figures are the four sights he saw on his way thither which decided him to relinquish the world. They are, in order: an old man, a sick man, a dead man, and a monk. The next figure is the Bodhisattva cutting off his hair with his sword, and, to his right, Śakra receiving it in a small shrine. Then comes a representation of Mount Meru, on the summit of which is Śakra's heaven. The figure next to this is the "Jewelled walk" stretching from East to West, on which he took exercise for a week, walking to and fro.¹ After the Jewelled walk comes the Ratanāgāra which was made for him by the gods to the Northwest. Then follows the Buddha under the Ajapāla or Goatherd's Banyan tree, where he sat scrutinizing the Dharma. Next comes the representation of the Buddha near the Mucalinda lake where the Nāga king of the same name protected him with his coils and hood from the heavy rain that poured down then. It will be remarked that Fig. 7 in Pl. LII, A. S. R., 1903-04, is much more realistic and artistic. This is succeeded by the Buddha under the Rājāyatana tree. It was at daybreak of the seventh day of his sojourn there that there arrived the two brothers Tapussa and Bhallika, who obtained some hairs from him.² The next figure shows us Sotthiya, the grass-cutter, offering the Bodhi-

¹ Cf. Fig. 4, Pl. LII, A. S. R., 1903-04.

² See page 155, A. S. R., 1903-04; and cf. *Mahāvastu*, Vol. III, 303 ff., where the account is much more probable than that current among the Burmans; the latter have appropriated to themselves the whole episode and made the heroes natives of Rangoon, renaming the country around Ukkala after the legend recorded in the Sacred Books, merely as an historical afterthought. For a very similar incident and the manner in which place-names were transferred from India to Burma, see *Note sur la géographie apocryphe de la Birmanie à propos de la légende de Purṇa*, B. E. F. E.-O., 1905, 146 ff.

sattva 8 bundles of grass. After this comes the seat of wisdom, eight cubits high, rising from the ground ; and, next the Buddha lifting his hand to express his doubt as to advisability of disclosing his profound doctrine, in answer to the prayer of Brahma Sahampati. The image next to the last, on the right represents the Buddha "inaugurating his spiritual dominion" by preaching his first sermon to his first five disciples, and the last scene is the Mahāparinirvāna.

As to the antiquity of the Hlèdauk pagoda itself there is no doubt. A stone inscription belonging to it was found among the collection made by king Bodawpaya ; it gives the year 473 B. E., that is 1111 A D., as the year in which the pagoda was built. Alaungsithu marched against Yunnan with a strong force, and on his return built nine shrines in the Shwebo district and several others in the Madaya Township, of which the Hlèdauk pagoda is one. This inscription enables us to rectify the Hman Nan Rājāvaṇ, the standard history of Burma, which was compiled with much care and scholarship, for it gives the year 470 B. E. as the year of the foundation of this pagoda, instead of 473, that given by the inscription.

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VISHNU IMAGES FROM RANGPUR.

THE accompanying plates illustrate five stands of metal images recently brought to light in the Rangpur District of Eastern Bengal. They were found quite accidentally by a Sonthal cooly while ploughing in ground belonging to the Rāj Kumār of Tāj hāt, and were appropriated under the Treasure Trove Act by Mr. C. Tindall, the Officiating Collector. The exact date of the discovery is said to have been the 6th November, 1910. The locality is described as near Sahebganj, in Thana Govindganj of the Gaibandha Sub-Division. In Mr. Tindall's report to Government, from which the above details are taken, it is stated that the cooly struck something hard below the ground with his ploughshare, and on digging down found a large earthen pot with bricks above it and below. It was within this pot that the five images were found.

As the largest of the five is some three feet high, and the others are also of substantial size, it is clear that the pot must have been unusually large, and it is regrettable that steps were not taken for its preservation along with the treasure. The very few broken fragments shown to me were much too minute to afford any evidence as to its nature, beyond the fact that it would seem to have been of ordinary earthenware, undecorated. But no accuracy of judgment is possible with only the existing fragments to go by.

Neither were the bricks preserved which were found above and below the deposit.

Thus, no evidence now exists as to the precise period at which the images were buried. But as they are clearly of pre-Muhammadan date, it may be surmised with reason that they were buried to preserve them from desecration at the hands of some Moslem invader, and there is nothing to militate against the identification of this invader with Bakhtiyār Khilji himself, whose eastward advance is said to have taken place in 1203 A.D.

This statement, however, should be understood as a mere supposition. Neither is anything more than a hypothesis possible as to the exact age of the images, as no certain criterion appears to exist. But it will not, I think, be questioned that considerations of style alone suffice to place them within the period commonly called

mediæval and associated with the dynasty of the Pālas, the limits being roughly the 8th to the 12th centuries. From what point within this period the bronzes date no one can now affirm with certainty. But it is probable, owing to the fact that the Pālas were Buddhists, that these Hindu deities date rather from the middle or end of their rule than from its commencement. The legend of Mayanāmatī, however, as has been pointed out by Mr. Bisvesvar Bhaṭṭāchārya,¹ is sufficient evidence for a certain amount of religious friction in the Rangpur District in mediæval times, and there is thus no reason to assume a date definitely subsequent to the Pāla rule, although that rule terminated earlier in the East than elsewhere. The excellence of the workmanship, particularly in the larger images, tempts one to assign them to as early a period as is consistent with the facts as we know them. Bitpālo, the famous bronze founder of the East, lived in the 9th century,² but as it is fairly certain that he must have been a Buddhist, from Tārānāth's mention of him in connection with the Buddhist monarchy, it is of course impossible to associate the present images with his name. Neither is there any reason to suppose they are so old as this would make them. On the other hand, it is reasonable to assume that they are not altogether remote from him in time, as they show certain characteristics of mediæval sculpture which would seem to place them about the 10th century. It is possible, therefore, that they can legitimately claim to be examples, not of Bitpālo's work, of course, but of the bronze school derived from him in Eastern Bengal.

My reasons for this ascription are as follows: First, the excellence of the work would seem to preclude any much later date. Secondly, the close similarity in detail between the image shown in Fig. 1 of Pl. LXX and the Vishṇu statuette in the Mathurā Museum pictured as Fig. 150 in Mr. Smith's *History of Fine Art*, page 207, would point to a close connection in time. This statuette is also dated in the 10th century. Then, again, in the small bronze shown in Fig. 3, of Pl. LXXI, the device of the lion and the elephant is noteworthy. In the image of Buddha from Kurkihār illustrated in Fig. 3 of Pl. XLII of the Annual Report of the Archæological Survey for 1903-04 the same device occurs in what Dr. Vogel has shown³ to be a slightly older form, that is to say, with the lion standing just behind, rather than actually upon, the elephant. As the Kurkihār statue is dated in the 9th century, on epigraphic as well as stylistic grounds, the 10th is again indicated for the bronzes under discussion, and I believe may therefore be accepted provisionally as a close proximation to the truth. I say the 10th rather than the 11th on stylistic grounds chiefly, assuming that the nearer one approaches to the period of Bitpālo, the higher the merit of the bronze will be.

Little need be said as to the images themselves, as the plates adequately indicate their exceptional excellence and extraordinary state of preservation. The style in general is manifestly formal, but this is true of almost all mediæval work, and does not detract from their comparative merit.

The image shown in Pl. LXX, 1, is the largest⁴ and is in practically perfect condition, the only damage being the slight corrosion of the pedestal and the

¹ Cf. *J. A. S. B.*, Vol. VI, March 1910, p. 133.

² Cf. Vincent Smith's *Hist. of Fine Art in India*, p. 305.

³ *Op. cit.*, p. 216.

⁴ Its dimensions are: height with screen, 36½"; height of pedestal, 6"; height of central figure, 21½"; width of screen, 15¼".

minuter worshipping figures and Garuḍa, and the loss of the large jewels with which the top of the screen and the several ornaments of the Viṣṇu image were adorned. These jewels were apparently removed when the bronzes were buried, as the cavities all show ancient corrosion. Like all the others, the sculpture represents Viṣṇu with his attendant goddesses, and, in this particular case, Garuda, the vehicle of the God, and two subsidiary worshippers. The central image is of the usual four-armed type, the hands holding the customary attributes. In the upper right hand is the mace, the handle of which is very long and attached to the top of the lotus on which the Viṣṇu stands. The upper left holds the discus, which is here so fashioned as to resemble rather a diminutive *gadā* itself than the strictly canonical *chakra*. In the lower left hand is the conch shell, while the lower right is extended in the *varada-mudrā*, or attitude of bestowing favours upon the worshipper. The palm is marked with a conventional representation of the lotus, which thus completes the four attributes of this divinity. It would be superfluous to emphasize the artistic merit of the image. The extreme skill and grace with which the hands are modelled, particularly the upper hands, are self-evident, as is also the excellence of the workmanship in the attributes themselves. The *talaka* and the eyes of the central figure, it may be noted, are of silver, the latter having the pupils marked in black. This naturalistic treatment adds curiously to the animation of the image, and, in my opinion, undoubtedly enhances its lifelike appearance. I would call attention also to what seems to me the great skill with which the multiple arms are represented. I cannot myself agree with Mr. Vincent Smith that there is an obvious call here for the surgeon's amputating knife. The two superior arms are not depicted at all in a disfiguring way and when they are so delicately and successfully modelled as in this instance, I, for one, fail to find anything monstrous or offensive in them. That, however, is a matter of individual taste. All will, I think, agree that the figure as a whole is excellent. The exaggeration of the "lion-body" is not excessive, and although the legs are almost wholly schematic, and in this respect present a curious contrast to the naturalism of the hands, this is a defect common to almost all metal images in India, and does not affect the comparative position of the statue among images of its own class. The pose of Lakṣmī, the little goddess on Viṣṇu's right who holds the lotus, is of course exaggerated. But for all that the figure is not unpleasing, and it is certainly not lacking in either grace or animation. The figure on the left, holding a *vinā* or lute, is Sarasvatī, but in my judgment the image is wooden, and, despite its greater naturalism, far short of the pendent goddess in artistic effect. Of the little Garuda at Viṣṇu's feet it is unnecessary to speak. The pose is good, but the corrosion here and on the worshipping figures lower down on the pedestal prevents any accurate critique of the artistic merit of the images. It would be interesting to know whether these worshipping figures represent the donors of the image. It seems highly probable, but I do not know that it can be affirmed absolutely.

Fig. (2) of Pl. LXX is another very large image,¹ of great artistic merit, although inferior, in my opinion, to the statue just described. The central figure

¹ The dimensions are . height over all, 34½', height of pedestal 4½'; height of central Viṣṇu, 17½', width of screen, 15'

shows the same defects, the waist being again too attenuated, and the legs still more wooden, although less spindling. As usual, the hands and the attributes are admirable, but the face is distinctly less pleasing. The attendant goddesses are better balanced perhaps, and neither shows the conventional pose in so extreme a form as the Lakshmī in the first group. But this merely illustrates how little mere naturalism has to do with artistic effect, for I take it that all will agree that of the four goddesses in question the first Lakshmī is the most successful. It should be noted, however, that the identity of the attendant figure on the left of Vishṇu in this group is open to question. Elsewhere in these bronzes the attribute of the *vīṇā* appears clearly to indicate Sarasvatī, and the inference is therefore easy that the same goddess is depicted here. But although this would accord very well with Vaishṇava usage in Bengal, which is echoed by the unquestioning designation of this figure as Sarasvatī by Mr. Jagadīśanāth Mukherji in the careful description of these bronzes which he published in the vernacular *Patrikā* of the local *Sāhitya Parishat*,¹ it should at the same time be remembered that there is authority for identifying the figure otherwise. In the Śāradā-tilaka Nārāyaṇa is described minutely in words which apply to our group with great accuracy, and he is there said to be accompanied by Indirā and Vasumatī.² Mr. Mukherji declares the image is Sarasvatī with the *vīṇā*, বক্র ভাবে ধৃত, i.e., *carried sinuously*, or simply bent, crooked. In this he must surely be wrong, for how such an inflexible article as a *vīṇā*, whose handle must of necessity be straight, could be intended by the curving object held by this goddess, I fail to see. Unless I am much mistaken, the attribute is really a lotus, and its selection in this place would appear due to considerations of rhythm or symmetry. In the circumstances, therefore, I am inclined to interpret this figure as Vasumatī or Prithivī, after the Śāradā-tilaka, although elsewhere there is no doubt but what Sarasvatī is actually intended.

Another point of interest in the present group is the halo behind the Vishṇu's head. In the other stands we have the usual lotus supported in various ways. The most successful method, and the one most harmonious with the general style of the whole sculpture, is that shown in Pl. LXX, 1, and its close parallel in Pl. LXXI, 4. The open, lacy effect, is quite in keeping with the rest of the screen. Here, the solid background is less congruous with the general design, but it is none the less interesting for that reason. The form of the lotus in the halo, too, is quite different from the others, and deserving of notice. Mr. R. D. Banerjee of the Calcutta Museum tells me the water-lily is intended, not the lotus, as is indicated by the number and the narrowness of the petals. I have been unable to find confirmation of this statement, but it appears very probably correct.

The third image (Pl. LXXI, 4) is smaller³ and decidedly less delicate

¹ Cf. the article entitled বঙ্গপুত্রে আবিস্কৃত বিষ্ণুর্ভূক্তি (মন্দির) in the বঙ্গপুত্র-সাহিত্য-পরিষৎ পত্রিকা, Part V, Nos. 3 and 4, page 128.

² I quote from the Archæological Survey of Mayūrabhaṅja by Mr. Nāgēndranāth Vasu, Introd., p. xli.

ভগ্নদ্বিবাক্রাময়নিশং শঙ্কং গদাং পঙ্কজং চক্রা বিম্বতমিন্দ্রিরাবসুমতীসংশীভিপার্শ্বদ্বয়म् ।
কোটীরাঙ্গদহারকুণ্ডলধরং পীতাম্বরং কৌসুমং দীপং বিশ্বধরং স্রবচ্ছবিলসচ্ছৌর্যস্ফিটং ভজি ॥

³ Its dimensions are: height, with screen, 1' 10½"; height of pedestal, 9½"; height of central image, 13", height of attendants, 6½"; width of screen, 9½".

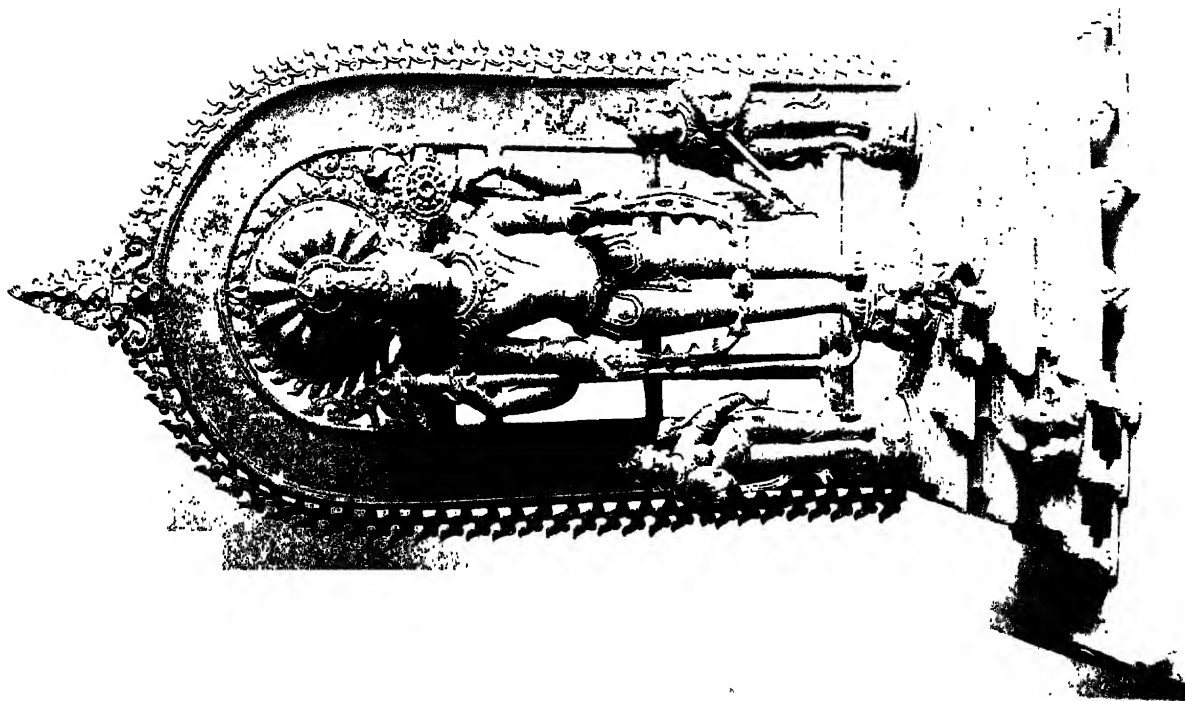
than the others, particularly as regards the face and the expression of the Vishṇu, which here wears both a stare and a smirk in unhappy combination. Neither are the hands at all so delicately modelled. The attendant figures are badly corroded, especially the Lakshmi, while from the same cause the Garuḍa has lost all but his general outline. The design of the screen itself is good, and considerably more consistent and harmonious in its several parts than the screen of the statue just described.

The remaining images (Pl. LXXI, 3 and 5) are both much smaller than the others, the former measuring only $11\frac{3}{4}$ inches with the screen, the latter $13\frac{1}{2}$ ".¹ Of Fig. 5 I need only remark the general lack of refinement both in the design of the supporting screen and in the details of the Vishṇu image, and the meaningless and unpleasant exaggeration of pose in the attendant figures. The absence of all except the simplest jewellery is in harmony with the general inferiority of the piece compared with the rest of the collection. Apparently, the artist himself felt that it was hardly worth jewellery at all. The whole stand, moreover, is at present in a less satisfactory state of preservation. It was selected for examination by Mr. Hooper, the Assayist, and was unfortunately broken into several pieces in transit.

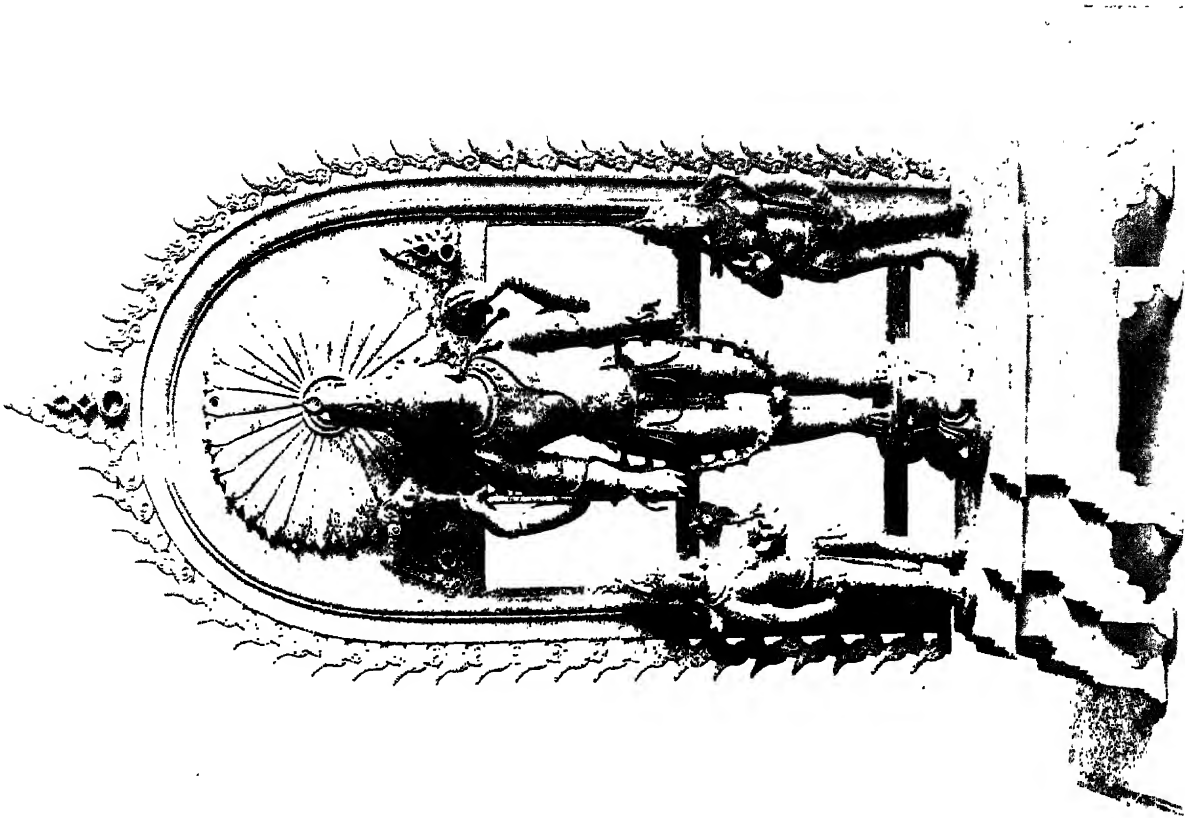
The other image, however, Fig. 3 of Pl. LXXI is perhaps the most interesting of the lot. It is certainly the most intricate and elaborate in its design, although less delicate in its various details. The presence of the Kirttimukha or mask at the top of the screen is of special interest. Mr. R. D. Banerjee affirms that this device never appears on images dating after the Muḥammadan invasion. If this is true, it is of course clear corroboration of the antiquity of the present bronzes, but I do not know his authority for the statement. My own impression is that the Kirttimukha is fairly common in Orissa and elsewhere in what might be called modern times. It would seem a surprising circumstance if it had been eliminated from Hindu design by so irrelevant an occurrence as the Moslem advance. But at all events its presence on this image is a point of interest. The little figures in the screen behind the conventionalized lotus of the halo are identified by Mr. J. N. Mukherji with the ten avatārs, and in this he is presumably correct, although I cannot make out the individual figures. However this may be, there is no mistaking the identity of the very rampant lions surmounting the recumbent elephants in the design of the screen behind the attendant goddesses, and the harmonious way in which this *motif* has been worked into the general design is admirable. The possible significance of this device for the dating of the image has been pointed out above. I should like to add that the design, as we have it here, is said to be peculiarly the emblem of the Pāla dynasty. In point of chronology this would agree very well with the conclusions already drawn as to the age of the bronzes. But, nevertheless, I cannot believe that the device here has any such significance. A lion rampant upon an elephant is, as Dr. Bloch says,² "to be seen projecting from the front of the spire in every temple in Orissa," and since the Pālas were

¹ The other dimensions are (1) Fig. 3: height of pedestal, $1\frac{3}{4}$ "; height of central Vishṇu, $5\frac{3}{4}$ "; width of screen, $5\frac{1}{2}$ "; (2) Fig. 5, height of pedestal, $2\frac{1}{4}$ "; height of central Vishṇu, 8'; height of attendants, $3\frac{3}{4}$ "; width of screen, 5".

² Cf. Annual Report of the Archl. Survey, 1902-03, p. 49.



(Fig. 1.)



(Fig. 2.)

of course Buddhists, who did not include Orissa in their territory,¹ it is as clear that this device is not necessarily associated with them, as it is improbable that it has any reference to them in the present instance.

Reference has been made above to the assay which was attempted to determine the composition of the metal. Mr. Hooper reported that it is a bronze consisting of copper, lead and tin, with traces of antimony, zinc and iron. He added that the figure was encased in a hard buff-coloured or light brown enamel, which had been chipped off in places, and which appeared to be composed of Kaolin or clay with some binding material. It is worth noting, however, that whereas this enamel was buff-coloured in the specimen submitted to Mr. Hooper, the majority of the images show an enamel of a most beautiful and delicate light green colour, which is certainly not the effect of corrosion. This is particularly striking on the background of Fig. 2 of Pl. LXX although conspicuous also on other specimens. It is evidently this enamelling which has saved the images from corrosion, and which accounts for their remarkable preservation. As regards the analysis of the bronze also, I should like to observe that it would seem clearly to indicate that the actual composition consisted of the so-called *ashṭa-dhātu* or eight metals. It is true that no trace of gold or silver is mentioned in Mr. Hooper's report, but it is equally true, I believe, that the merest atom of these metals, if added to the blend, is enough to constitute the theoretical composition desired. It was of course not feasible to damage the selected specimen by the analysis of more than a minute portion, and the absence of manifest traces of gold and silver does not, therefore, exclude the possibility, still less destroy the probability, that in intention the bronze was of the *ashṭa-dhātu* type. Mr. Mukherji, I observe, makes the same assumption.

The slight variation noticeable between the several images, in the form of the attributes (the discus in particular) and in the pedestals of the attendant figures, is of too trifling import to warrant discussion. I should like, however, to call attention to the exceptional lightness and elegance of the mace in the upper right hand of Fig. 2 of Pl. LXX. I find it difficult to conceive how this attribute could be more delicately fashioned or more gracefully held.

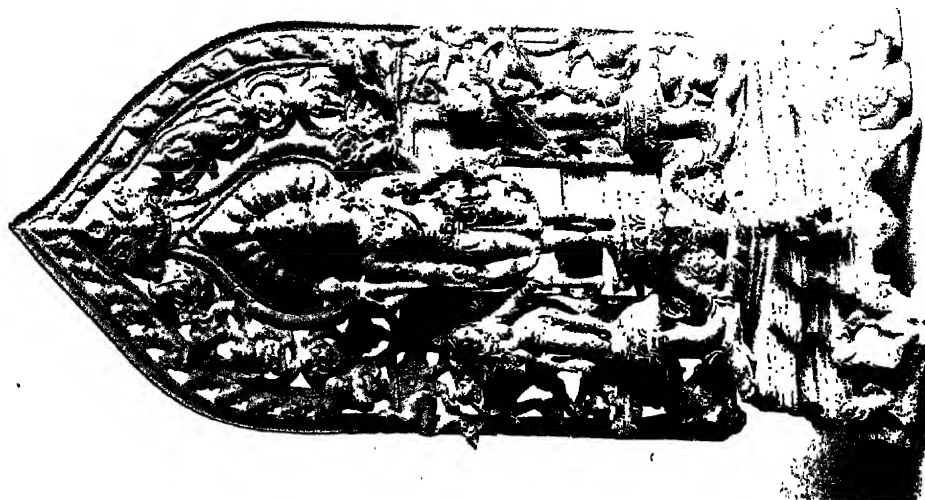
It only remains to note the disposal made of these images. Unfortunately, only the older rules for governing procedure under the Treasure Trove Act are as yet in force in Eastern Bengal. These rules are deficient as regards cases of treasure not consisting of coins and the result in the present case has been regrettable. Considerable time elapsed (nearly six months indeed) between the discovery and the Collector's first official report to Government, while a still longer period passed before the Government Archæologist was consulted. Meanwhile, such strong local sentiment had been aroused, that, when finally the time for a decision arrived, it was rightly enough judged inexpedient to wound the religious feelings of the community, and a favourable ear was accordingly lent to the prayer of the people that two of the images should be retained in Rangpur and be reconsecrated. It is understood that the Mahārāj Kumār of Tājhat is to construct a

¹ So Vincent Smith, "Hist. of Fine Art," p. 183. But the same author in his paper on the Pāla Dynasty (Indian Antiquary for Sept. 1909, p. 247) speaks of the victory of Jayapāla over the lord of the Utkalas, quoting the Bhāgul-pur grant of Nārāyapāla. I regret that I have no access to Dr. Hultzsch's discussion of the inscription, but I assume that Jayapāla's victory remained fruitless.

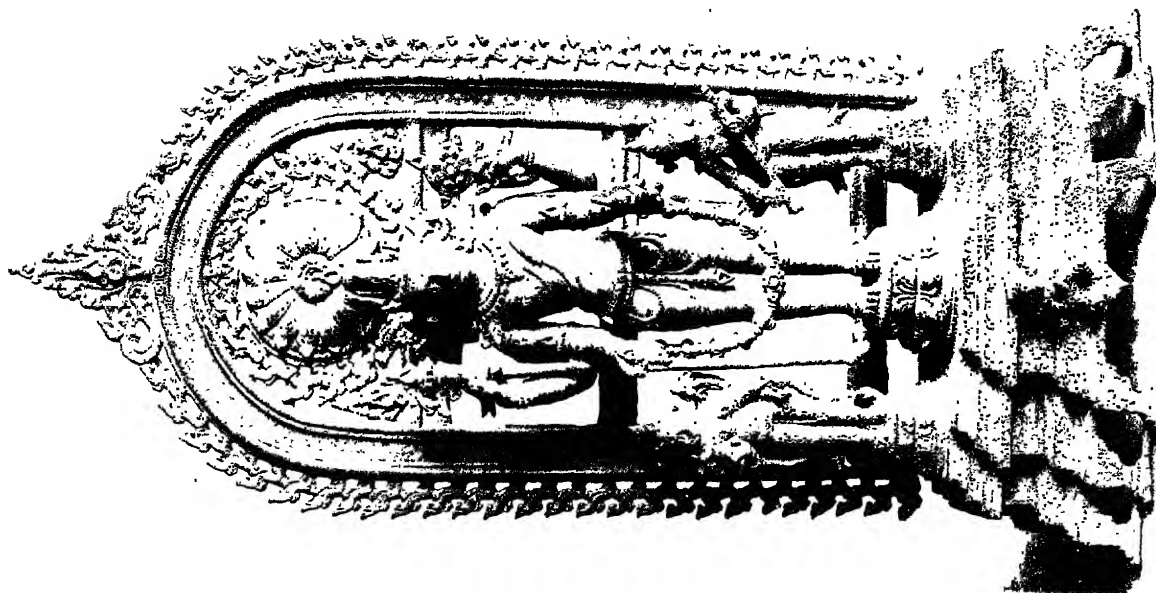
temple for their enshrinement, and that their worship will be duly instituted afresh. The duty of selecting the two images to be so consecrated devolved upon the Government Archæologist. I accordingly visited Rangpur in July of 1912, and after careful examination of the Treasure in consultation with the Collector, Mr. De, and the taking of photographs and detailed notes, selected three of the five as acquisitions for the Indian Museum in Calcutta. The three selected were those represented here as Figs. 1 and 2 of Pl. LXX and Fig. 3 of Pl. LXXI. The two others, Figs. 4 and 5 of Pl. LXXI, were left at Rangpur, where it is hoped that their religious significance will be as greatly appreciated by the local Hindus as the artistic merit of the others is sure to be by the wider public having access to the Museum in Calcutta.

D. B. SPOONER.

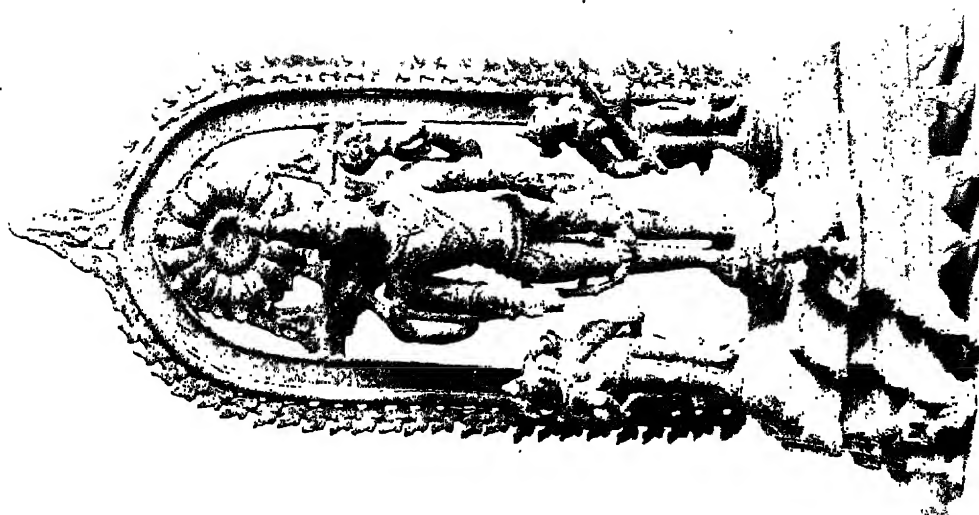
VISHNU IMAGES FROM RANGPUR.



(Fig. 3.)



(Fig. 4.)



(Fig. 5.)

ROCK-CUT TOMB NEAR CALICUT.

THE tomb here described is situated on private land to the left of the road from Malaparamba to Chevayur, and about a mile to the west of the Sub-Registrar's Office at the latter place. The distance from Calicut is about five miles, and, owing to the wretched state of the roads in this locality, the journey is a most unpleasant one.

The tomb was discovered in June, 1911, by some workmen whilst excavating the ground for laterite stone. Some three feet below ground they came across the rock-cut roof of the tomb and what appears to have been the original entrance into the sepulchre. This entrance faces the west and was completely closed with blocks of stone covered over with earth, so that no signs of the tomb were visible before excavation took place. On opening the tomb it was found to consist of a circular rock-cut chamber with a domed roof, supported in the centre by a short round pillar tapering from the top to the bottom, the entire structure, including the pillar, being hewn out of the solid laterite rock. The interior is very small, measuring only 7' 6" \times 7' 8" and 3' 9" in height (Pl. LXXII, 1 and 2). Cut into the north-west wall of the chamber, close to the entrance, is a small recess, not unlike a little doorway. On sounding this, it gave forth no hollow sounds and appeared solid behind, so apparently it is but a niche, and not a closed passage leading to another chamber beyond. The walls of the tomb had been left in their rough state, no attempt being made to dress them or to cover their rough surfaces with plaster. Standing on the floor of the tomb, were found a number of red earthenware cinerary and domestic vessels, mostly empty. The village munsiff, who was present before the contents of the tomb were removed, informed me that there were about twenty-five vessels in all, most of which appear to have been of the usual Indian pitcher or *chatti* type. A number of the vessels were broken in opening the tomb, probably by blocks of stone falling into the interior, as the excavation work proceeded above. Fortunately, however, some of the best specimens escaped destruction, and these will shortly find a place of safety in the Madras Museum. A few of the urns contained a mixture of fine red earth, ash, and minute fragments of bone, but nothing else. One vessel, curiously enough, contained a small quantity of water, probably due to percolation through the roof. No doubt, many of the vessels were originally filled with food for the use of the dead in the "Other World"

but, owing to the tomb not being air-tight, the contents have decomposed and vanished. With the exception of these earthenware vessels found standing or lying on the floor, the tomb was empty, and not filled up with the fine red earth which we invariably find in the rectangular cell-tombs or kistvaens.

Pl. LXXII, 3-7, illustrates the different types of urns and pitchers found in the tomb. The only other object found was a broken earthenware tray, 2' 3" in length, 1' 3" in width and about 2" thick, having a raised rim running all round, the ends of the tray being slightly rounded off. Attached to the under surface were originally eight little legs, about 1½" in height, so as to raise the tray from off the ground. Inside, was found a mixture of fine red earth, ash, and little pieces of bone, which was covered with an earthenware lid similar in size to the tray. It appeared to represent a miniature sarcophagus, and, judging from its small size, may have contained the remains of a child.

Fig. 3 illustrates the largest type of urn found in the tomb. But for the absence of handles, it is not unlike the amphorae of the Romans having the same pointed base for insertion in a stand or hole in the ground. In the photograph, the urn is shown inserted in its stand, which is 5" in height and 9" in diameter. The urn itself measures 1' 5" in height and 1' 3" in diameter at its greatest width.

Fig. 5 shows another kind of cinerary urn, with four little legs to take the place of the annular stands used with the bigger and heavier urns. It measures 1' 1" in height and 9" in diameter at its greatest width.

The other vessels were of the ordinary Indian pitcher or *chatti* type still in use. The larger ones measured 7" × 7" and the smallest 5" × 4½". All the articles are made of coarse red earthenware of medium thickness, and much the same in quality as that at present in use in this locality. The broken pieces are black inside and indifferently baked.

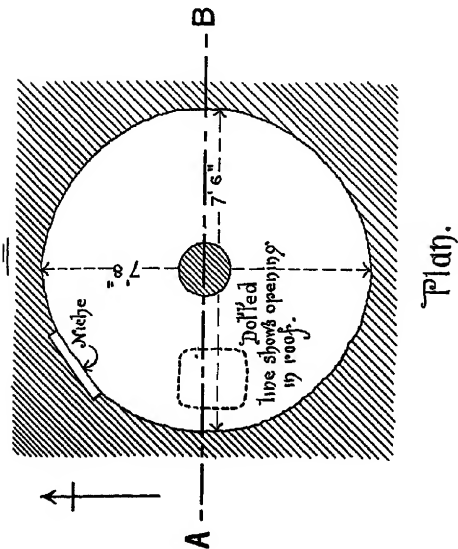
Vessels and trays similar to those described above have been met with before in many parts of Southern and Western India, some of which are now in the Madras Museum; but I am not aware that a tomb precisely of this type has ever been unearthed before in India.

I was fortunate in persuading the owner of the land to present the best specimens to the Madras Museum, and the village munsiff kindly undertook to see to their safe custody until the Tahsildar could arrange to have them carefully packed and despatched.

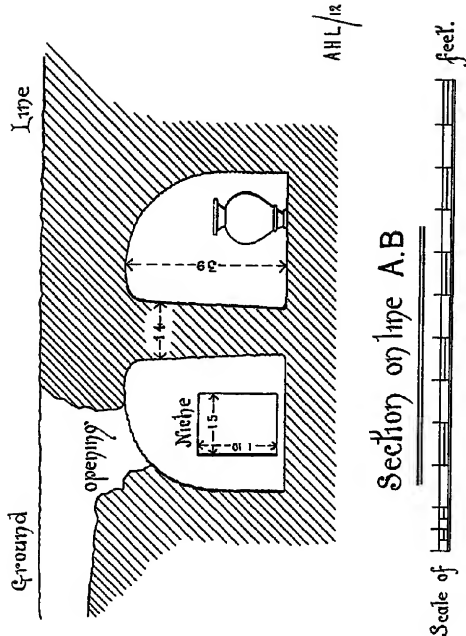
Thanks are due to the Hon'ble Sir John Atkinson for having called attention to the existence of this unique tomb and for suggesting its inspection by this Department.

A. H. LONGHURST.

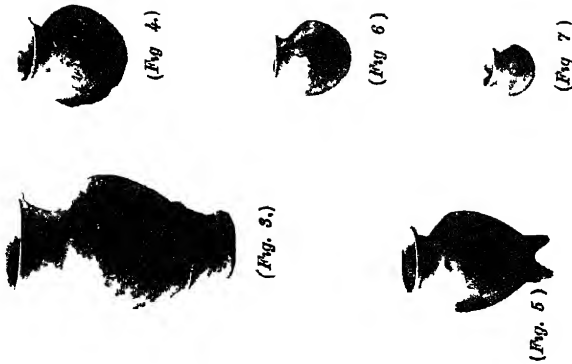
ROCK-CUT TOMB NEAR CALICUT.



(Fig. 1) GENERAL PLAN.



(Fig. 2) SECTION ON A & B.



(Fig. 3-6) CINERARY URNS.

FOUR SCULPTURES FROM CHANDIMAU.



(Fig. 8) INSCRIPTION ON THE PEDISTAL OF A BODHISATVA IMAGE OF THE 42ND YEAR OF THE REIGN OF RAMAPALADEVA.

FOUR SCULPTURES FROM CHANDIMAU.

THE village of Chandimau is situated on the old road from Silao to Giryek in the Bihar Sub-division of the Patna District of Bengal, at a distance of about three miles from the Giryek Police Station. A number of very fine Buddhist images were found here and removed by Mr. Broadley to the Bihar Museum, whence they were brought to Calcutta in 1895. Sir Alexander Cunningham visited the spot in 1871-72, and discovered an image of Buddha dedicated in the 12th (?) year of Rāmapāladeva of Bengal.¹ The site seems to have been left severely alone since that date. At least no record has survived of its exploration. The place simply abounds with Buddhist and Brahminical images and fragments. The village is entirely surrounded by arable land, and the only approach to it is a cart track across the fields leading from the unmetalled road from Giryek to Rajgir. At the southern extremity of the village a small mound is covered with potsherds and broken bricks where three or four images, mostly Brahminical, have been heaped together under some trees, and about five hundred yards from that spot is a large flat mound on which a modern Brahminical shrine has been built. The shrine and its yard are full of Buddhist images, which, according to the villagers, have been gathered from the neighbourhood for a radius of about two miles. Close by, at the foot of another mound, some ten or fifteen images, both Buddhist and Brahminical, were lying about on a plot of grass. The votive inscriptions on them and the general style of the sculptures bespoke the tenth or eleventh century A.D., as the date of their execution. One medium sized image of the Bodhisattva Avalokiteśvara, remarkable for its beauty, bore the longest votive inscription. (Pl. LXVIII, 1.) It records the dedication of the image on the 30th day of Āshāḍha of the 42nd year of the reign of Rāmapāladeva of Bengal by a merchant named Sadhu Saharāṇa, son of the Sādhu Bhadulva, who was originally an inhabitant of Rajagṛiha:—

1. *Om Yē dharmmā hētu prabhavā hētu tēshām hy-avada [t] tēshām (cha) yō nīrōddhō evaṃ vādi mahāśramaṇaḥ || Śrī-mad-Rājagṛihā (t) vinirggatēḥ || Ittraha grāmavasthitah || Paramōpāsaka Parama-mahajā (yā) nū [nu-yā] yinaḥ || Vanika Sādhu.*

¹ Cunningham, Arch. Survey Rep., Vol. XI, p. 169.

2. *Saharaṇasya (?) Sādhu Bhādulva-sutasya yad-atra puṇyaḥ || Tad-bhavata = āchāry-ōpādhyāya mātā pita (pitṛi) purvvaṅgama (m) Kṛtvā sakala (satva) sāsē [r-anuttara] jñāna-phala-vāptaya itiḥ || Parama-bhaṭṭāraka Paramēśvara Pārāmaran (?)*

3. [gata] . . . [pādānudhyā] ta Mahārājādhirāja Srīmad=Rāmapāladēvae -pāda-pravarddhamāna Kalyāṇa vijayarājyē saṁvat 42 Ashāḍha dine 30.

This image has now been brought to the Indian Museum. Close by, fragments of three finely carved pillars of the Gupta period were found in the walls of a native house. These pillars were secured for the Indian Museum in October 1911. None of them were found in a complete state of preservation. In fact, only one of them is even relatively complete, the rest being fragments from corners of pillars. The first pillar is the lower half of a large one, square at the base and with an octagonal shaft. (Pl. LXXV.) The shafts of these pillars are square from the base up to a height of 1' 9". At this height there is on each face of the pillar an oblong panel measuring 1' 4" × 10", which projected about ½" from the side, and contained a bas-relief. Over each panel is another semi-circular panel containing ornamental figures, such as a *Kīrtimukha*, or a *Kinnarī*, with arabesque work in the interspaces. The shaft over these semi-circular panels was octagonal in section, the spandrels above the semi-circular panels being filled up with ornamental foliage. On each alternate face of the octagonal portion of the shaft is a lion with one head and two bodies. (Pl. LXXV.) It is impossible to form any idea of the remaining portion of these pillars. When the pillars were removed from the walls of the house, no other fragments came to light, and the owner of the house did not know whence the pillars had originally come. Two of the pillars bear fragmentary inscriptions, in characters of the north-eastern type, in vogue during 5th or 6th centuries A.D. as well as a number of marks known as "shell-shaped characters."

Pillar No. I is, on the whole, in a better state of preservation than the others. The upper part of it, above the semi-circular panels, is of course missing, but three out of four of the oblong panels have been almost entirely preserved. Moreover, the square portions of the shaft below the oblong panels have escaped damage. The bas-reliefs in the oblong panels still remaining on the pillar represent scenes from the Mahābhārata. For the purpose of convenience I shall style these panels A, B, and C. The entire series of these bas-reliefs on this pillar represented the story related in one chapter (*Kairāta-parv ādhyāya*) of the *Vana parva* of the Great Epic. The pillar itself is 4' 5½" in length, and 1' 3" square at the base. The panel bearing the penultimate scene of the chapter is complete, and measures 1' 4" by 10".

The story begins in the second or right half of the panel A. The tree in the middle of the bas-relief divides it into two equal parts, of which the first or left half contains the last scene, and the right half the first scene, of the chapter. At the request of Yudhisṭhira, Arjuna went to see Śakra the lord of the Suras and Sankara, the God of Gods.¹

Arjuna started alone towards the North with a fine Bow and a Sword with a

¹ *Mahābhārata*, published by the Committee of Public Education, Calcutta, 1834, Vol. I, p. 463. V. 1523-152.

golden hilt. The following verses (vs. 1530-1535) contain a description of the forest into which Arjjuna entered. He was pleased with the forest and remained there performing harsh austerities.¹ He wore the bark of trees, used Kuśa grass as a bed, and was decorated with a staff (*daṇḍa*) and a skin. He ate the dry leaves of trees which had fallen. In the first month he ate fruits on every third night; in the second on every sixth; while in the third month he ate only once in a fortnight, and in the fourth month once only. He remained standing with arms raised aloft, standing on the top of one toe.² The right half of bas-relief A represents Arjjuna during the performance of austerities in the Himalayan forest. The single tree in the centre serves to represent the forest as well as to divide the panel into two different parts. Arjjuna is standing on one leg, holding a rosary aloft with both hands. Around him on four sides are four bowls with flames issuing from them. These indicate that Arjjuna was performing the harshest possible austerities, being surrounded by fire in summer and submerged in cold water in winter. Afraid of Arjjuna, the great sages approached Mahādeva in a body, and told him that "Pārtha³ is performing great austerities in the Himalayan tracts. He has clouded the four quarters with smoke and is persevering in his performance. We do not know what he desires. He has troubled us all, so please stop him." Having heard the words of apprehension from these great sages, Śiva told them that they need not be afraid of Arjjuna. He knew what was in Arjjuna's mind. Arjjuna did not want the Kingdom of heaven, wealth or long life. He would do what was wanted by Arjjuna.⁴ The sages, delighted with Śarvva's⁵ assurance, went to their respective places. After the departure of the sages Śiva, with Pārvatī, dressed as hill-men, with thousands of bhūtas and females, dressed in various costumes, went to the place where Arjjuna was performing austerities.⁶ At that time a wicked Daitya named Mūka was trying to attack Arjjuna, in the form of a wild boar. Arjjuna seeing him took up his bow and arrow, and addressed him in the following words: "As you desire to kill me though I have done you no hurt, I shall despatch you to the presence of Yama first." Seeing that Arjjuna was striking the demon, Mahādeva asked him to forbear, saying "I desired this animal aforetime"; but Arjjuna, paying no heed to the words, let fly the arrow. At the same time Śiva shot an arrow at the boar, and the demon died after forsaking his assumed form of the boar and showing his real one. Arjjuna then saw Śiva attended by women and addressed him as follows:—"Who are you, roaming in this forest surrounded with females. Are you not afraid of this dense forest? And why did you strike the boar which was my due. The boar came here to kill me and what you have performed to-day is against the rules of the chase. So, O hillman, I shall relieve thee of thy life to-day." The Kiratā only laughed on hearing this, and said: "We live in this forest and are not afraid of it. But why do you live here, and why do you roam about alone in this lonely forest?" Arjjuna replied "I live here in the protection of the *Gāṇḍīva* (bow) and *Nārācha* (arrow). This demon came to slay me in the guise of an animal." The Kiratā then accused Arjjuna of taking his prey. "I

¹ V. 1536-37.⁴ Vs. 1542-49.² V 1538-1541.⁵ Another name of Śiva.³ i.e., Arjjuna.⁶ 1550-57.

was chasing this animal ; it was killed by my arrow ; this was the object of my chase, and it is my prey ; you take my prey and at the same time accuse me of taking yours. I shall shortly relieve you of your life." Arjjuna became enraged upon hearing his words, and began to shoot. Śiva caught the arrows with his hands. At this Arjjuna became astonished and praised him saying "Who art thou ? Deva, Yaksha, Rudra, Sura or Asura ? Only the holder of the Pināka bow can withstand the *nārāchas* shot from my bow. I shall end your career very shortly with this *nārācha*." Arjjuna began to shoot fast, but all his arrows were caught by Śiva. Then arrows fell short in Arjjuna's quiver, and he became afraid. He thought of *Agni* (Fire) who had given him a quiver in which arrows shall never end (*akshaya tūṇa*). He began to think "Who is this man who catches all arrows that I shoot ? What shall I do with the bow when I have no arrows ? I shall slay him with the bow." But the bow was also taken away from him. He attacked the supposed Kirāta with his sword but the sword broke.¹

At the extreme right of bas-relief A is the head-less figure of a male standing in front of Arjjuna, wearing a loin cloth (*dhoti*) and another piece of cloth on his breast (*uttariya*). This may be the God Śiva dressed as a Kirāta. Unfortunately, the representation of the story up to the time of the fight is lost. The slaying of the boar and the fight with arrows was most probably represented in the next panel which is entirely missing. The bas-relief in the panel B (Pl. LXXIII, 3) represents the fight between Śiva and Arjjuna, first with the bow or sword, and afterwards with fists. About one-third of the bas-relief on this panel has been broken. On the extreme left we have two pairs of human feet. One pair probably belongs to Śiva but I am not able to assign any reason for the presence of the second pair. In the centre is a figure rushing towards the left. This is Arjjuna hurrying forth to strike with the bow or sword. The object in his hand is curved.

After losing his sword Arjjuna began to throw stones and fight with trees, but Śiva caught all these missiles. Failing in all these attempts, Arjjuna took to his fists. Śiva and Arjjuna fought for some time. Then at last Arjjuna bruised and senseless fell in a heap.² The last scene is to be found on the right side of the panel B where an emaciated figure is wrestling with a full fleshed man. The full fleshed man evidently is Śiva as the Kirāta, and the emaciated figure represents Arjjuna. Śiva is holding the left arm of Arjjuna with his right, while his left hand has grasped the latter round the neck and is drawing him on to the breast, most probably to press his breath out of his body—a trick often practised by modern wrestlers in India.

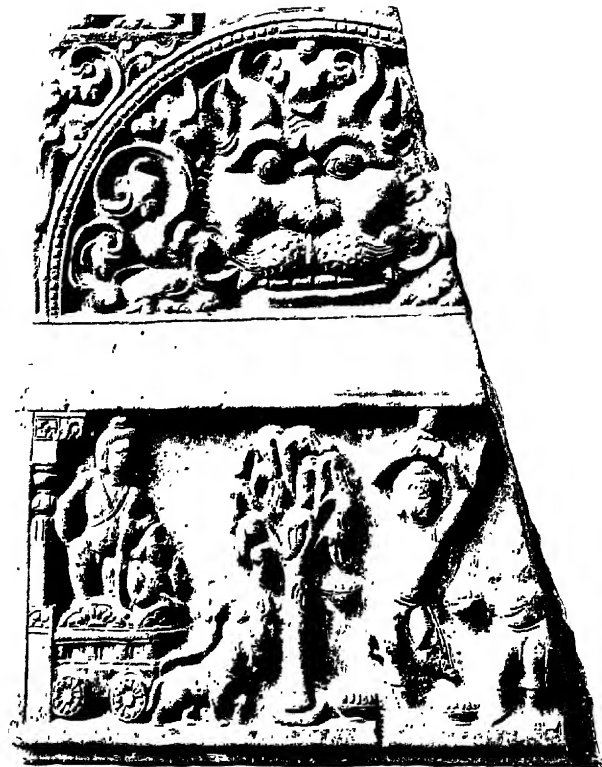
Arjjuna was on his feet in a moment. He made an earthen altar and began to worship Śiva. But the garlands with which he worshipped the emblem flew to the head of the Kirāta. Arjjuna then came to understand who his assailant was, and fell at his feet. Bhava was pleased.³ This scene is represented in the bas-relief on panel C. On the extreme left of the scene a man is kneeling in front of a four-armed male. The kneeling figure evidently stands for Arjjuna and the four-armed figure is Śiva. In the text we find Śiva saying to Arjjuna

¹ V. 1558-1603.² V. 1604-1613.³ V. 1614-17.

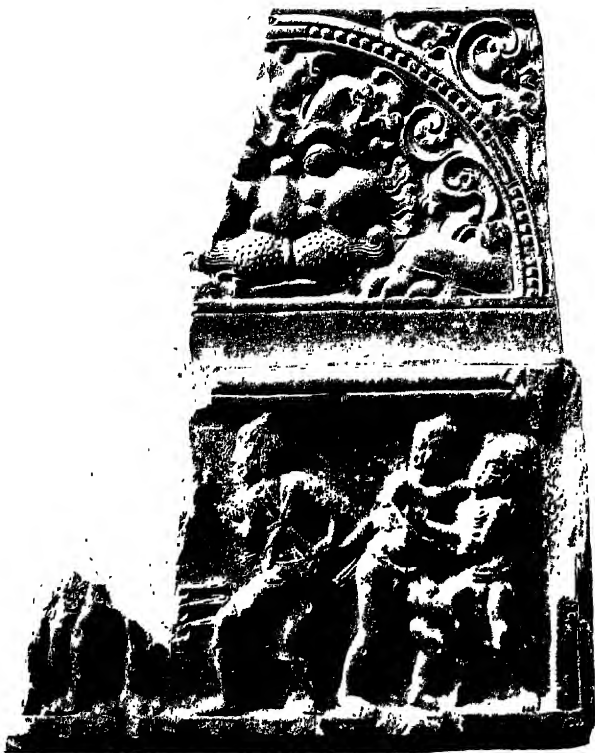
FOUR SCULPTURES FROM CHANDIMAU.



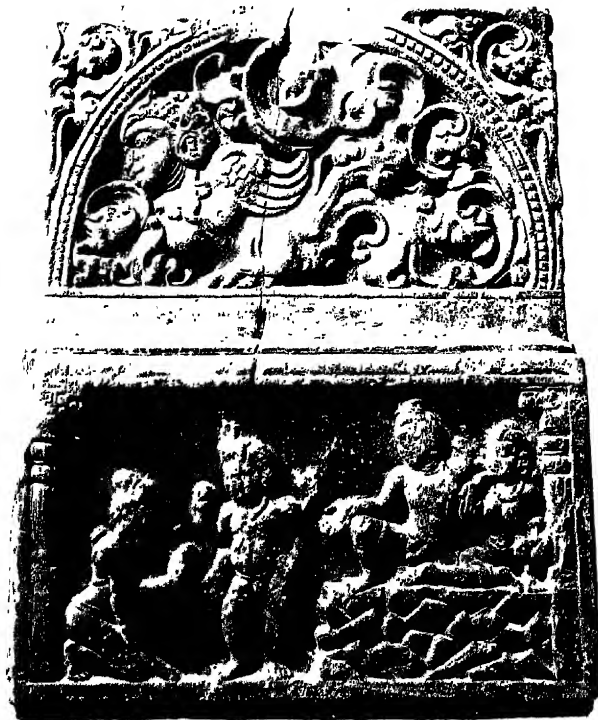
(Fig. 1.) IMAGE OF BODHISATTVA LOKANATHA.
DEDICATED IN THE 42ND YEAR OF THE REIGN
OF RAMAPALADEVA.



(Fig. 2.) BAS-RELIEF ON PILLAR 1, FACE A.



(Fig. 3.) THE SAME, FACE B.



(Fig. 4.) THE SAME, FACE C.

FOUR SCULPTURES FROM CHANDIMAU.



(Fig. 1.) BAS-RELIEF ON PILLAR 2, FACE A.



(Fig. 2.) THE SAME, FACE B.



(Fig. 3.) BAS-RELIEF ON PILLAR 3, FACE A.



(Fig. 4.) THE SAME, FACE B.

“You were formerly a Great Sage; so I give you (fresh) eyes (*i.e.*, *Divyachakshu-shī*). Behold me.”¹ The four hands indicate that Śiva had laid aside the form of the Kirāta and was showing his divine form to Arjjuna. The objects in the hands of Śiva are not discernible. Śiva then showed the forms of his consort Pārvati and himself.² The scene is to be found in the right half of the bas-relief on panel C. Śiva and Pārvati are seated on some rocks which represent the Himalayas. Śiva’s right hand is extended in the posture of benediction, while the left rests on Pārvati’s shoulder. There is no doubt about the identity of the figure. The rest of the verses in the chapter go on to describe the dialogue between Śiva and Arjjuna. In the end Arjjuna obtains his desired weapons and Śiva goes away.³ The Lokapālas and the Gods come to Arjjuna and enrich his store of weapons by giving away their special ones.⁴ The left half of the bas-relief on panel A contains the opening scene of the *Indra-lok-ābhigamana parvva*. When the Lokapālas had departed, Arjjuna thought of Lord Indra for his chariot. As he was thinking, Mātuli, the divine charioteer, appeared on the scene with Indra’s chariot.⁵ The left half of the bas-relief A shows Arjjuna in the car of Indra being driven towards the land of the Gods. The length of panel A is 1’ 2½”, of B and C, 1’ 4.”

The semi-circular panel above the oblong panels A and B contain fine lion’s heads with their front paws and arabesque designs in the interspaces. The semi-circular panel above the oblong panel C contains a female Kinnarī surrounded by arabesque work. On the square face of the pillars below the panel A are a number of so-called shell-shaped characters, and, below B, a fragmentary inscription, consisting of a single word in characters of the 5th or the 6th century A D.—

āṭharasya

and to the left :—

Śrī-ma.....ṇya.

The square face below panel B is plain.

Only one corner of the second pillar is extant. It is the highest of all three and shows the double bodied lion at the corner almost fully. One face bears half of a panel measuring 8½” in length and containing a bas-relief, which represents a female figure kneeling on the back of a Makara, with hands clasped in adoration. It is evidently meant to represent Gangā, whose vehicle is the Makara. A male attendant holds a parasol over her head. A peacock flies overhead with a garland, while traces of a man’s hand and rocks are discernible on the extreme left. The right corner of the bas-relief is also damaged. The fragment of a semi-circular panel contains the figure of a Kinnarī and arabesque work. Most probably the original design consisted of a Kinnara and a Kinnarī facing each other in the centre and arabesque work in the inter-spaces. Below the panel on the square face of the pillar are some stray letters. To left, one above another are three letters :—

Ra, Na, Pra,

and to the right a single one : *bhū*.

On the adjoining face of the pillar which we designate B, we find Śiva and Pārvati seated on some rocks. The male figure is Śiva. A female kneels in front

¹ V. 1620, p. 466.

⁴ V. 1665-1713.

² V. 1623.

⁵ V. 1714-15.

³ V. 1625-1660.

of the pair, holding a bowl aloft with her left hand while the right rests on the ground. Śiva is pointing down with one finger of his right hand, while the left is engaged in holding up his consort's chin. Another female attendant, dressed in a close fitting robe, is carrying a child, perhaps Kārttikeya, and is looking at the divine pair. The scene may have some connection with the story of the birth of Kārttikeya. The fragment of the semi-circular panel above contains the head and a fore-paw of a horned lion, and arabesque scrolls. The length of the panel is $9\frac{1}{2}$ ".

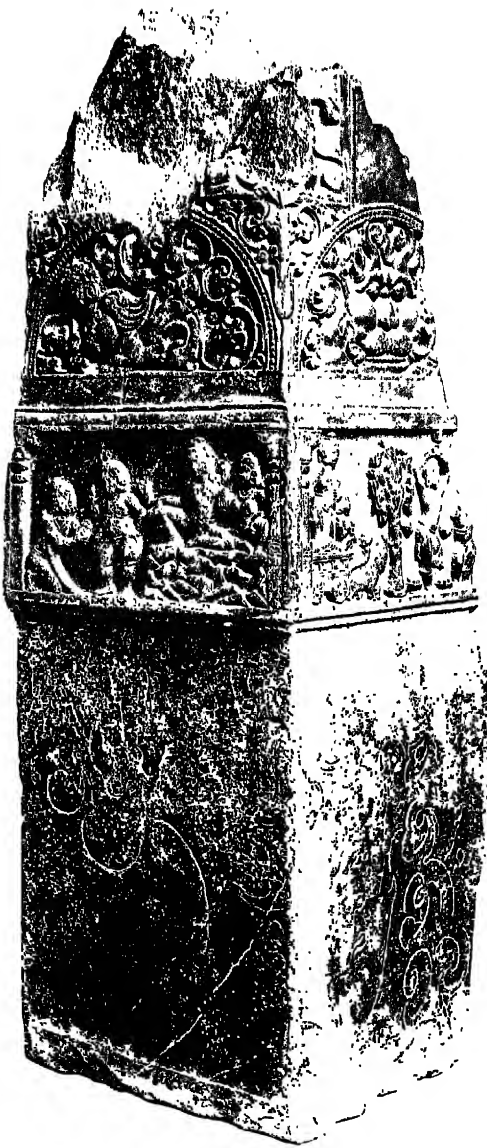
The third pillar is also a fragment from one corner. It is broad at the base and narrow at the top; consequently a very small portion only of the two bas-reliefs has been preserved. The panel on one of the faces of this pillar contains almost one half of a bas-relief, representing a male seated on rocks, with snakes issuing from masses of matted hair. He is staring sternly towards his left. To his right, a girl (?) is kneeling at the foot of the rocks while two males are standing with hands clasped in adoration (*Kṛitāñjalipūta*). If the kneeling figure be a female, then the scene may be taken to represent the burning of Madana (Madana-bhasma). Madana, the God of Love, shot his five arrows at Mahādeva when Gaurī, the daughter of Himalaya, was worshipping him, and the former was burnt by the flames which issued from the eyes of Śiva. This formed the prelude to the birth of the War-God. The length of this panel is 9". Below the panel on the face of the square portion is an inscription in acute angled characters of the 6th or 7th century A.D. :—

Śrī-Bhīma (?) de (v)....

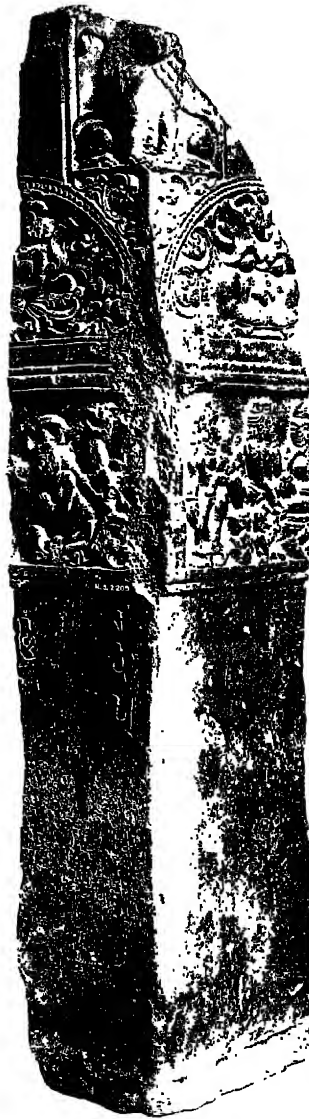
The panel on the adjoining face of the pillar contains a very small fragment of a bas-relief representing a dwarf lying on the ground, while another is capering by his side or running away from him. The length of this panel is 7".

The miscellaneous inscriptions on these pillars help to fix their dates. If these were carved by vandal pilgrims in the fifth or sixth centuries A.D., then the work must be assigned to the 4th or 5th century. The fine workmanship indicates clearly that the carving belongs to the early Gupta period.

R. D. BANERJI.



(Fig. 1.) PILLAR 1.

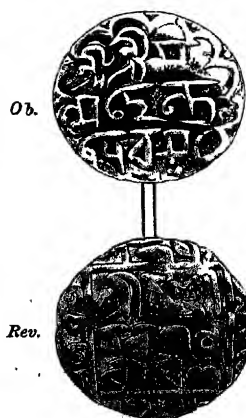


(Fig. 2.) PILLAR 2.

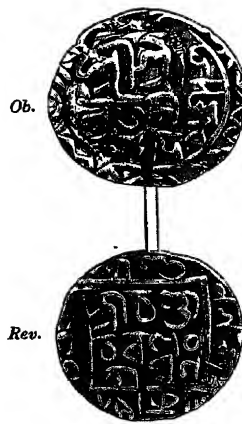


(Fig. 3.) PILLAR 3.

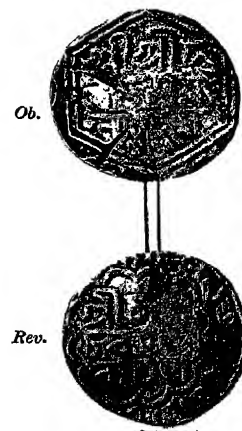
TWO NEW KINGS OF BENGAL.



(Fig. 4.)



(Fig. 5.)



(Fig. 6.)

(Fig. 4-6.) SILVER COINS FROM PANDUA AND BASUDEVPUR.

TWO NEW KINGS OF BENGAL.

THE names of two new independent Kings of Bengal have been recently brought to light by the discovery of three silver coins in the Maldah and Khulna Districts of the Presidency of Bengal. In January, 1911, two old coins were shown to me by the late Babu Radhesh Chandra Sett, B.L., a pleader of Maldah. They were made of silver and bore legends in Bengali Characters on both sides,—a fact which succeeded in rousing considerable local interest in them.

According to Radhesh Babu, the coins were discovered in a field about four miles from the celebrated Ādinā Masjid at Pāṇḍuā in the Maldah District. The coins were also examined by Pundit Rajani Kanta Chakrabartti of Maldah, Babu Akshoy Kumar Maitreya, B.L., of Rajshahi, and several other gentlemen in my presence. Subsequently, Radhesh Babu published an article on these coins in the Rungpur Branch of *Baṅgīya Sāhitya Parishat Patrikā* with two indifferent photographs. Immediately before his death in August, 1911, Radesh Babu came to Calcutta for treatment, and at that time I learnt from Babu Byomkesh Mustafi, one of the Assistant Secretaries of the *Baṅgīya Sāhitya Parishad*, that the coins were intended as a present to the newly formed Museum of the *Sāhitya Parishad*. Radhesh Babu died very suddenly on the 25th of August, 1911, before he could carry out his intention of presenting these two coins to the *Baṅgīya Sāhitya Parishad*. Subsequently, I made two distinct attempts to get the coins for examination through Prof. Benoy Kumar Sarkar, M.A., of the Bengal National Council of Education, and Babu Bepin Chandra Ghose, B.L., Pleader of Maldah, but without success. Consequently, I have been obliged to rely on the photographs published by Radhesh Babu for the following description of the coins. The drawings accompanying this article have been prepared from the photographs published by Radhesh Babu in the Journal of the Rungpur Branch of the *Baṅgīya Sāhitya Parishad*. The third coin was discovered by a Muhammadan while digging the ground in the village of Basudebpur in the District of Khulna. Later on it was secured by Babu Jnanendra Nath Roy of the same village, who made it over to Prof. Satish Chandra Mitra of the Daulatpur Hindu Academy in the Khulna District. I received the coin from Prof. Mitra, who has expressed his intention to present it to the Museum of the *Baṅgīya Sāhitya*

Parishad. All three of these coins are made of silver and round in shape. The types are close copies of the coins of the independent Sultans of Bengal.

The first two coins were found by a farmer in a field four miles from the Ādinā Masjid at Pāṇḍuā, who sold them to a gold-smith in Old Maldah bazar. They were secured for Radhesh Babu by Babu Krishna Chandra Agarwalla, Manager of the “*Gauḍadūta*” of Maldah. The following description of these two coins is based on notes taken by me during the actual examination of the coins in January, 1911, and Radhesh Babu’s description :—

- (1) *Śrī-man-Mahēndradēva*—round silver coin, 170 grains, diam. $3\frac{1}{4}$ ”

Obverse :—In scalloped circle (1) *Śrī-śrī-ma-*
(2) *nmahēndra-*
(3) *dēvasya.*

Reverse :—In square in circle (1) *Śrī-chaṇḍī*
(2) *charana-pa-*
(3) *rāyana.*

Margin :—In segment of circle above square *Śakāvdā* ; to left of square, 336 ; below square, *Pāṇḍu* ; to right of square, *Nagara*.

Radhesh Babu read the date as “336” and the latter half of the marginal legend as *Pāndanagara*. He also took considerable pains to prove that the coin was actually minted in Śaka year 336, i.e., 414 A.D.

- (2) *Śrī-Danujamarddanadēva*—round silver coin, 167 grains, diam. $3\frac{3}{4}$ ”.

Obverse :—In circle with arabesque border (1) *Śrī-śrī Da-*
(2) *nujamardda-*
(3) *nadēva.*

Reverse :—In square in circle (1) *Śrī-chaṇḍī*
(2) *charana-pa-*
(3) *rāyana.*

Margin :—In segment of circle above square, *Pāṇḍu*, to left of square *Nagara* ; below square, *Śakāvdā* ; and to right of square, 339.

Radhesh Babu read the date as “239,” and tried his best to prove that the coin was minted in Ś. 239 i.e., 317 A.D.¹

In type and weight these two coins resemble the silver coinage of the independent Sultans of Bengal and present no new features, except that they are written in Bengali characters. The fact that they were written in Bengali character³ proved conclusively that they could not have been minted in Ś. 239 and Ś. 336 as surmised by Radhesh Babu, but even then I could not undertake to restore the original legends at that time, as both the coins were unique. There was very little doubt about the fact that the dates on both coins consisted of four figures instead of three, and that the true date of these coins lay in the 15th century A.D. instead of the 3rd and the 4th. The missing link in the chain of evidence was supplied by the discovery of the third coin, which is in a fair state of preservation :—

- (3) *Danujamarddanadeva*—round silver coin, 160 grains, diam. $3\frac{1}{2}$ ”.

¹ *Rungpur Sahitya Parishat Patrikā*, V, P II, p 73

Obverse :—In double hexagon (1) *Śrī-śrī-Da-*
 (2) *nūjamardda-*
 (3) *naḍēva.*

Reverse :—Scalloped circle in plain circle (1) *Śrī-chaṇḍī*
 (2) *charaṇa-pa-*
 (3) *rāyaṇa.*

Margin :—*Śakāvda "1339" Chandradvīpa.*

The importance of these three coins lies in the fact that they bring out the names of two independent Kings of Bengal and that of two new mints, *viz.*, *Pāṇḍunagara* and *Chandradvīpa*. Radhesh Babu had tried to prove that *Pāṇḍunagara* is the same as Pāṇḍua or modern *Pāṇuā*, a station on the Katihar-Godagari Section of the Eastern Bengal State Railway. In support of this he cited Cunningham, who has recorded a tradition that Pāṇḍua was also known as *Pāṇḍavā*. The proximity of the find-spot of these coins to the modern village and ancient ruins of Pāṇḍuā has much to speak in favour of this identification. The other mint Chandradvīpa is certainly the Chandradvīpa, also called Bāklā, the Bacola of early European travellers and the Boglā of the Ain,² which is the name of a parganah in the Backerganj District of Bengal.

We learn from these three coins that a king named Mahendradeva was reigning at *Pāṇḍunagara* in Bengal in Ś. 1336=1414-15 A.D. Three years later we find that another king named Danujamarddanadeva was reigning in the same place (S. 1339=1417-18 A.D.) Pāṇḍunagara is most probably the Pāṇḍuā of modern maps and the Firūzābād of Muhammadan history. In the very same year we find that Chandradvīpa was included in the kingdom of Danujamarddanadeva. The status of these kings was much higher than that of the rebel zamindars of Bengal such as *Pratāpādityarāya* of Jessore, *Sitarāmarāya* of Bhushnā, and *Chāndrāya* and *Kedārārāya* of Eastern Bengal. These two kings were powerful enough to issue a coinage of their own, and in the year 1417 their kingdom extended from Pāṇḍuā in North Bengal to Chandradvīpa on the coast of the Bay of Bengal. In 1414 A.D. we find that a king named Shihāb-uddīn Bāyazīd Shāh was nominal ruler of Bengal. The cabinet of the Indian Museum contains four silver coins of this king, three of which were issued from the mint of Firūzābād in the year 816-17 A. H.=1413-14 A.D. We know nothing about the relations of these Sultans with the House of Shamsuddīn Iliyās Shāh. Prof. Blochman identified him with king Shams-uddīn, son of Saif-uddīn Ḥamza Shāh³; but in his *Catalogue of Coins in the Indian Museum*, Mr. H. N. Wright correctly places Shihāb-uddīn Bāyazīd Shāh as a successor of Shams-uddīn. The dates given in the Riyāz-us-Sālātīn are slightly earlier than those found in the coins of these kings. For example, we find that Shams-uddīn Iliyās Shāh died in 785 A. H., but we find that coins are issued by Ghīyās-uddīn Azam Shāh in 799. Similarly, we find that Shams-uddīn, son of Ḥamza Shāh, died in 788 A. H. At the time when the silver coin of Mahendradeva of the Pāṇḍunagara mint was issued, we find that Shihāb-uddīn

¹ This side of the coin bears two chisel marks.

² Jarett's *Ain-i-Akbari*, Vol. II, p. 134.

³ *J. A. S. B.* 1873, Pt. II, p. 263.

Bāyazid Shāh was in possession of Firūzābād or Pāṇḍuā. The cabinet of the Indian Museum contains three coins of this king, issued in the years 816 and 817 H from the mint at Firūzābād. In subsequent years we find that Jalāluddīn Muḥammad Shāh, *alias* Jadu, the son of Raja Kāns, was in possession of the mint at Firūzābād. The only solution of this dilemma is that either the identification of Firūzābād with Pāṇḍuā is uncertain, or that Jalāluddīn Muḥammad Shāh, though dispossessed of Pāṇḍuā, still continued to issue coins from other places in the name of the mint of Firūzābād. The latter suggestion has probability in its favour. The cabinet of the Indian Museum contains silver coins of this king issued from the mint of Firūzābād in 818, 819, 822, 823, 824, 828 and 834 ; so we find that in the Śaka year 1339, when the Chandradvīpa and Pāṇḍunagara mint coins of Danujamarddanadeva were issued, the Muhammadan King of Bengal also issued coins in the name of the same mint, that is, Firūzābād, Pāṇḍuā or Pāṇḍunagara.

The Chandradvīpa mint on the coins of Danujamarddanadeva is significant, because an old family of landholders, who had held the parganah of Chandradvīpa from time out of mind, later on known as the Sarkar of Bāklā, claimed to have been descended from this Prince. The genealogical tables of the castes in Bengal are for the most part unreliable and at present I am not in a position to discuss the validity of the claim.

R. D. BANERJI.

AGE OF RĀJĒNDRA-CHŌLA I. AND HIS CONQUESTS; (A. D. 1012—42).

CHŌLA kings like Parāntaka I.¹ and Rājarāja I.² consolidated their territories and thus established their claim for greatness. Rājēndra-Chōla had larger opportunities of improving the position in which he found the Chōla dominions. The object of this article is to show that Rājēndra-Chōla also called Gaṅgaikoṇḍa-Chōla, Muḍigoṇḍa-Chōla, Madhurāntaka, Uttama-Chōla and Vikrama-Chōla,³ actually left the Chōla empire in a much more improved state when he died.

Rājarāja's conquests were Vēṅgai-nāḍu, Gaṅga-pāḍi, Nuḷamba-pāḍi, Taḍigai-pāḍi, Kollam, Kaliṅgam and Īlam (Ceylon) and the seven and a half *lakshas* of Irattapāḍi. What is meant by the conquest of Vēṅgai-nāḍu is not quite clear. I have suggested elsewhere that Rājarāja simply put a stop to the interregnum in that country by placing Śaktivarman on the throne.⁴ Ganga-pāḍi, Nulamba-pāḍi and Taḍigai-pāḍi are believed to be in Mysore. Kollam is on the west coast; Īlam is Ceylon and the seven and a half *lakshas* of Irattapāḍi are meant to denote the Western Chālukya empire. As regards Kaliṅga we are not told what actually took place. In the Chōla pillar on the Mahēndragiri mountain, we are informed that a general of Rājēndra-Chōla (named in Tamil, Rājēndraśōla-Ppallavaraiyaṇ Rājarājamārāyaṇ)⁵ overcame the Kulūta king named Vimalāditya and set up a pillar of victory. Thus the Vimalāditya who was overcome by the Chōla general was only a Kulūta chief—not an Eastern Chālukya or Kaliṅga, as hitherto supposed. The theory that the Chōla king Rājēndra-Chōla I. took the Eastern Chālukya Vimalāditya prisoner, to

¹ See my paper on the 'Grāmam inscription of Parāntaka,' *A. S. R.* for 1905-6, pp. 171 to 184 and on 'Two Uttaramallūr inscriptions,' *A. S. R.* for 1904-5, pp. 131 to 145.

² *Madras Christian College Magazine* for December 1894 and September 1896.

³ The last three of these surnames are taken from his unpublished Thiruvālangāḍu plates. For another surname Paḍḍita-Chōla, see below, p. 176.

⁴ *Ep. Ind.*, Vol. VI, p. 349.

⁵ No. 397 of the Madras Epigraphical Collection for 1896. The Sanskrit inscription (No. 396 of the same collection) appears to give the name of the general as Dattākara.

the Chōla country is no longer tenable.¹ Vimalāditya² must have gone to the Chōla country on an altogether different mission.

Now let us go on with Rājendra-Chōla's conquests. Rājarāja had to recruit an army, while Rājendra-Chōla inherited "the great warlike army" whose services are referred to in every inscription. The first conquests of Rājendra-Chōla were Idaiturai-nādu, Vanavāsi, Kollippākke and the camp of Maṇṇai, all of which are included in the Mysore State,—Vanavāsi being situated in the Bombay Presidency almost on the border of the Shimoga district. Perhaps Rājendra-Chōla had to quell some local rebellions here. Next follows his disposal of Pāṇḍyas and Ceylon. Rājarāja's conquest of Ceylon must have been complete as we have a Tamil inscription of the king in that island.³ Besides, Rājarāja had ordered three or four villages in Ceylon to supply some of the requirements of the Tanjore temple.⁴ Rājendra-Chōla had only to guard against Ceylon becoming turbulent. With the Pāṇḍyas who were the hereditary enemies of the Chōlas, Rājendra had to adopt a definite policy. And this he seems to have attempted by starting the title Chōla-Pāṇḍya and conferring it on his son who was to be the viceroy of the Pāṇḍya country.⁵

The *Mahāvamsa* gives us a connected account of what happened in Ceylon about the end of the tenth century and the beginning of the eleventh. During the reign of Dappuḷa V. (A. D. 940-52) king Pāṇḍu, because he feared the Chōlians, left his country and got into a ship and landed at Mahātitttha. The king of Ceylon was disposed to help the Pāṇḍu but a fiercer strife arose among the princes of the island to the great misfortune of Pāṇḍu. Consequently the Pāṇḍu left his crown and other apparel and went to Kēraḷa. During the reign of the Singhalese king Udaya III (A. D. 964-72) the Chōla king attempted to regain the whole country once held by the Pāṇḍu and sent emissaries to obtain the crown and the rest of the apparel that the king of Pāṇḍu left there when he fled.⁶ But this attempt did not meet with eventual success and the crown and the apparel remained in Ceylon. In A. D. 1036 there was a Chōla invasion, when the Chōlas "took the queen with all the jewels and ornaments and the crown that was the inheritance of kings and the priceless diamond bracelet that was a gift of the gods, and the sword that could not be broken and the sacred forehead band." Incriptions of Rājendra-Chōla refer also to "the crown of the king of Īlam (Ceylon) who came to close quarters in fighting; the ex-

¹ In the Annual Report on Epigraphy for 1895-6, paragraph 22, we are told that Rājendra-Chōla having defeated (his brother-in-law) Vimalāditya set up a pillar of victory on the Mahēndra mountain. It is not clear when the war between Vimalāditya and Rājendra-Chōla was fought. In the historical introductions of Rājendra-Chōla, the conquest of Vēṅgī is not mentioned at all; but in later records of the king's reign where the introduction becomes abbreviated into *Pūrvadēsamum Gaṅgaigum Kiṭṭāramum koṇḍa*, Pūrvadēsa is identified with Vēṅgī. If Vēṅgī had been conquered by Rājarāja and order had been restored by him in that province, what is the necessity for another war? Vimalāditya's queen was the Chōla princess Kundavā-Mahādēvi and her father was the Chōla king Kō-Rājakesarivarman alias Śrī-Rājarājadēva I. The accession of Rājendra-Chōla took place between the 27th March and 7th July A. D. 1012 while the accession of Vimalāditya took place on Thursday, the 10th May A. D. 1011. The identity of Pūrvadēsa with the Vēṅgī country is easily established from the earlier inscriptions of Kulōttuṅga's reign. In all probability Rājendra-Chōla and Vimalāditya began life as friends and perhaps it was latterly, if at all that they became enemies.

² The Kulūta Vimalāditya was probably called after the Eastern Chālukya king of the same name.

³ Madras Epigraphical Report for 1910, p. 9, paragraph 8.

⁴ *South-Ind. Inscr.* Vol. II, part IV, pp. 427-8.

⁵ Madras Epigraphical Report for 1906, p. 68, paragraph 17.

⁶ Chapter LIII, pp. 81 to 84.

⁷ *Ibid.* LV, p. 90.

ceeding beautiful crown of the queen of that (king); the beautiful crown and the pearl-necklace of Indra, which the king of the South had previously deposited with that (king of Īlam)."¹ Some of the statements of the *Mahāvamśa* are thus confirmed by the records of Rājendra-Chōla and must, therefore, refer to his campaign against Ceylon. But while according to the *Mahāvamśa* these events took place in A. D. 1036, Tamil inscriptions show that they must have happened before 1017.²

The Kēraḷa country is next mentioned as having been conquered by him and with it the island of Śāndimattivu. The latter is apparently the name given to the tract of land in Kēraḷa reclaimed by Paraśurāma. The seven and a half *lakshas* of Irattapādi had already been conquered by Rājarāja. But all the same it was necessary for the son to reconquer it. If Rājendra-Chōla's conquests had stopped with the taking of the seven and a half *lakshas* of Irattapādi he would have followed mostly in the footsteps of his father and no originality could be claimed for him. But he was apparently a man with a powerful imagination. He must have had unbounded confidence in his 'great and warlike army' and his trusted generals and wanted to go out of the beaten track. He undertook an expedition against the North. As the sacred waters of the Ganges are stated to have been conquered or obtained with the help of 'the great and warlike army' the most important object of the expedition might have been to fetch the Ganges' water on a very large scale.

From the Tiruvālaṅgāḍu plates it appears certain that Rājendra-Chōla did not accompany the expedition against Northern India himself. It was in charge of a commander (*daṇḍanātha*). The expedition was more in the nature of a pilgrimage³ to the Ganges and the instructions to the general were apparently to fight against those who showed themselves unfriendly either to the Chōlas or to their expedition. The reason for the Chōla army advancing against Northern India is thus set forth in the Tiruvālaṅgāḍu plates :—

ततः प्रभावादवतीर्णगंगम् भगीरथम् बाहुबलाञ्जसन् सः ।
गंगाजलैः पावयितुं स्वकीयां [इ*]षेष्ट पृथ्वीं रविर्वंशदीपः ॥
तदीयतीरस्थितभूमिपालान् विरोधिनी जेतुमथादिदेश ।
दण्डाधिनाथम् बलवद्वलौघं शौर्यासद्वन्नीतिमदयगण्यम् ॥

Rājendra-Chōla made fun of Bhagīratha who brought down the Ganges to the earth as the result of his penance. The light of the solar race wished to purify his own country with the water of the Ganges. Of the kings who dwell near the banks of the river those who showed themselves unfriendly had to be overcome. A very serious difficulty here which requires explanation is how a single Chōla general could have conquered such a large extent of territory. Almost the whole of his conquest of Northern India must have taken place in A. D. 1023. It comprised : (1) Uttira-lāḍam (North Berar), (2) Mahīpāla, (3) Gōvindachandra of Vaṅgāladēśa (4) Raṇa-sūra of Takkaṇa-Lāḍam, (5) Daṇḍabhukti⁴ and the defeat of Dharmapāla in a hot

¹ *South-Ind. Inscr.*, Vol. II, Part IV, p. 403.

² [In his article entitled "Contributions to Singhalese Chronology" (*J. R. A. S.* for July 1913), Professor Hultzsch has discovered an error of 23 years in the traditional figures given for the Singhalese sovereigns in Mr. Wijesinha's Translation of the *Mahāvamśa*, Part II, pp. XVII to XXVIII.—H. K. S.]

³ See below p. 176.

⁴ Daṇḍabhukti as a province subordinate to the Gauḍa king Rāmapāla is mentioned in the *Rāmapāla-charita*; *Ep. Ind.* Vol. IX, p. 322.

battle, (6) Kōśalai-nāḍu where Brāhmaṇas assembled, (7) Oḍḍa-vishaya, difficult of approach, (8) Ādinagar, (9) capture of Indraratha of the old race of the moon, (10) Pañchappalli and the good Māsūni-dēśam, (11) Śakkarakōṭṭam, (12) Maduramaṇḍalam and (13) Nāmaṇaikkōṇam.

Again, it is difficult to imagine how all this tract of country was overcome in about a year by the Chōḷa army. There is also the further difficulty of bringing all the subdued kings together to the South. These latter must have actually carried the water of the Ganges from somewhere near Allahabad, if the superstitions that now prevail were also current during the eleventh century A. D. In this connection we cannot afford to ignore the beginning of the Gāhaḍavāla inscription at Gaṅgaikōṇḍachōḷapuram, the Chōḷa capital, quoted in the sequel. As we cannot imagine that all Northern India was conquered by Rājendra-Chōḷa's general in about a year the only reasonable alternative seems to be that a few previously chosen tracts of country were actually invaded and if the inhabitants offered any resistance a regular war was gone through. The names of the remaining territorial divisions with their rulers were ascertained and included in the list of kings overcome. I am only making a suggestion here and what actually took place might be altogether different.

The exact course which these roving pilgrims followed in Northern India cannot be easily traced at present. For instance Māsūni is a purely Tamil name and could not be applied to any part of North India. It is a translation of Nāga-dēśa or some equivalent of that name.¹ Oḍḍa-vishaya is the name of Orissa and Kōśalai-nāḍu is probably Southern Kōśala. Raṇasūra ruled over Takkaṇa-Lāḍa, *i.e.*, Dakṣhiṇa-Virāṭa or Southern Berar, while Gōvindachandra was the ruler of Vaṅgāla-dēśa, *i.e.*, the Bengal country. Mahīpāla whom the Chōḷas deprived of his elephants and women is identified by Professor Kielhorn with the Pāla king Mahīpāla I. The last items of conquest are Uttara-Lāḍam, *i.e.*, Uttara-Virāṭa or Northern Berar and the Gaṅgā, *i.e.*, the river Ganges. The Chōḷa Tamil inscriptions refer to "Vaṅgāla-dēśa where the rain-wind never stopped, (and from which) Gōvindachandra fled having descended (from his) male elephant." I do not find anything to substantiate the existence of this Gōvindachandra. Gōvindachandra of the Gāhaḍavāla family came to reign nearly a century later.

The sole cause of the Chōḷa invasion of Northern India as already stated, was to take the purifying water of the Ganges to the Chōḷa capital. Consequently they must have made friends with those kings who were reigning near Benares and Allahabad. And we find an inscription of Mahīpāla at Sārṇāth with the date Samvat 1083 = A. D. 1026. This may be regarded as the time when the Chōḷa influence was established at Kanauj. This influence seems to have been kept up even in the succeeding reigns. During the reign of Rājakesarivarman Rājādhirājadēva, the title "protector of the people of Kaṇṇakuchchi" had been bestowed by the king on one of his royal relatives.² This shows that the relation between Kaṇṇakuchchi (Kanauj) and the Chōḷas remained as close as in the previous reign. In the succeeding reigns of Chōḷa kings too, I have no doubt that the memory of this relationship was cherished

¹ Could this be a reference to the Bastar country which was ruled over by the Nāga or the Nāgavamāni kings? That it is mentioned with Śakkarakōṭṭam (identified with Chakrakūṭa in Bastar) is significant.

² *South-Ind. Insers.* Vol. III, Part I, p. 56. Virarājendra also conferred a similar title on one of his relatives; *ibid.*, p. 62.

with great care. During this interval, perhaps several visits and revisits (or return visits) must have been exchanged between Gaṅgaikondachōlapuram and Kanauj. At the former place is an inscription of Kulōttuṅga I. dated in A. D. 1110-11. After the regnal year of the king, is the following :—

अकुंठोत्कंठवैकुंठकंठपीठलुठत्तरः ।
 सरंभस्सुरतारंभे स श्रियः श्रयसेस्तु वः ॥
 आसीदशीतद्युतिवंशजातस्त्र्यापालमालासु दिवं गतासु ।
 साक्षाद्विस्वानिवभूरिधान्ना नान्ना यशोविग्रह इत्युदारः ॥
 तत्सुतोभून्महीचन्द्रश्चन्द्रधामनिभं निजं ।
 येनापारमकूपारपारे व्यापारितं यशः ॥
 तस्याभूत्तनयो नयैकरसिकः क्रान्तदिषन्मण्डलो
 विध्वस्तोद्धतधीरयोधतिमिरः श्रीचन्द्रदेवो नृपः ।

Here the inscription stops abruptly. The passage quoted is a copy of a portion of the introduction in the copper-plates of the Gāhaḍavāla king Gōvindachandra of Kanauj.¹ That the Gāhaḍavāla family-*prasaṣti* is put in after the name of the Chōla king Kulōttuṅga I. shows clearly that the Chōlas were to be looked upon as overlords.

The conquest of Katāha (or Kidāram in Tamil) is another very bold stroke on the part of Rājēndra-Chōla I. His father Rajarāja had allowed Māraviṣayōttuṅgavarman, son of Chūḍāmanivarman to build a Buddhist *vihāra* at Negapatam. The former (Māraviṣayōttuṅgavarman) is described as *Śailēndra-vamśa-sambhūta*, *Śrī-vishay-ādhipati* and *Kaṭāh-ādhipatyam-ātanvan*.² The king of Katāha with whom Rājēndra-Chōla was fighting was Sangrāmaviṣayōttuṅgavarman. We are not told what the causes were which altered the relationship of the Chōlas to this feudatory family. The claim of the family to belong to the Śailēndra-vamśa, might connect them with some part of Orissa.³

The foundation of the city of Gangaikondachōlapuram in the old Trichinopoly district, is generally ascribed to Rājēndra-Chōla, also called Gangaikondachōla. There is also a tradition that the temple Gangaikondachōlēśvaram is older than the Rājārājēśvara temple at Tanjore. In the first place the records of none of the early kings is found on the temple wall. In fact not a single inscription has as yet been found mentioning the town, either before the 6th year of Rājēndra-Chōla under the form Mudigondachōlapuram or before the 19th year under the designation Gangaikondachōlapuram. It seems to be apparent that the original name of the town was Mudigondachōlapuram and was subsequently altered into Gangaikondachōlapuram. It was for over a 100 years the capital of the Chōlas. The place is frequently referred to in inscriptions, being sometimes called Gangāpurī and at other times Gāṅgakuṇḍa. Its great Saivite temple is deservedly famous. It has

¹ The connection of Gōvindachandra with the South is established by the Sarnāth inscription of Kumārādēvi (*Ep. Ind.*, Vol IX), where it is stated that this queen was the daughter of a chief of Fithī (i.e., Pithāpuram).

² See the Leyden Plates published in Vol IV of the Archaeological Survey of India, p. 207, text-line 80 f.

³ The Buguḍa plates of Mādhavavarman state that this chief was a member of the Śailavamśa and was ruling from Kaingōda somewhere in the Ganjam district

been seriously doubted whether the temple was built by Rājendra-Chōla or by his father, the great Rājarāja I. Its plan and design are similar to those of the magnificent temple at Tanjore, though it is not as large. It is stated at the end of the Tiruvālaṅgāḍu plates that the Chōla king was living at Muḍigoṇḍachōlapuram.

Paṇḍita-Chōla was another surname of Rājendra. The *Kaliṅgattu-Parani* calls Kulōttuṅga's adoptive father Rājendra-Chōla I., as Paṇḍita-Chōla.¹ A regiment of archers in Tanjore attached to the temple of Rājarājēśvara were known as *Paṇḍita-Chōla-terinda-villigal*, 'the chosen archers of Paṇḍita-Chōla,' evidently after this surname of Rājendra-Chōla. What could have been the cause for the king assuming such a surname is not quite clear. It shows, at any rate, that Rājendra must have himself been a scholar (*paṇḍita*) in Sanskrit, or taken deep interest in its progress, to deserve such an appellation. The *Vīraśōḷiyam* of Buddhāmītra who was a contemporary of one of Rājendra-Chōla's successors, Vīrarājendra I. quotes the well-known historical introduction *tiru manni*, etc., found at the beginning of Rājendra-Chōla's inscriptions, in illustration of one of the metres and introduces into Tamil grammar, perhaps for the first time, terms like *pala-ner-chchamāsam* which is a clear translation of the Sanskrit *bahuvrīhi-samāsa*. This indicates an advanced stage of Aryan element in the progress of Tamil language and must be accounted for to a certain degree, to the influence which the Northern expedition of Rājendra-Chōla (or of his general), exercised upon himself and his subjects. The several northern kings who carried the water of the Ganges to purify his country and their connection with the South for some generations after, could not but have affected even the language of the people. There is reason to believe also that Śaivism which largely flourished in the time of Rājendra-Chōla was due to his intimate connection with the North. In Trilōchanaśivāchārya's *Siddhāntasārāvalī*, in the commentary on verse 9 of the *Kriyāpāda*, we are told:—

राजेन्द्रचोळ इत्याख्यः चोळभूपो महीम् वसन् ।
गङ्गास्नानार्थमागत्य दृष्ट्वा शैवान् वरान् तदा ॥
स्नात्वा प्रतिनिवृत्तस्सन् तान् समादाय शैवकान् ।
स्वराज्ये स्थापयामास शैवाचार्यवरान्स्तदा ॥
काञ्चीमध्ये चोळभूमौ सर्वत्रैव प्रविस्तराः ॥

The Chōla king Rājendra-Chōla went for a bath in the Ganges, saw the best of Śaivas there and brought them with him to settle in his own country, in Kāñchi and throughout the Chōla land. This statement confirms also the suggestion made above that Rājendra-Chōla's expedition to the North was purely in the nature of a pilgrimage.

V. VENKAYYA.

¹ *South-Ind. Insers.*, Vol. III., Part II, p. 127.

THE THIRD VIJAYANAGARA DYNASTY; ITS VICEROYS AND MINISTERS.

THIS dynasty of Vijayanagara kings to which the alternative name Karnāṭa is frequently applied in modern epigraphical literature, includes in it potentates who strived—and perhaps strived successfully—to maintain with unabated energy the empire which was started nearly two and a half centuries ago by the adventurous brothers Harihara I and Bukka I and which, subsequently, was embellished by powerful and enlightened monarchs such as Harihara II, Dēvarāya I, Dēvarāya II, Narasimha, Kṛishṇarāya and Achyuta. For over one century, practically from the time of Sadāśiva almost down to the British settlement on the Coromandel coast, despite the crushing defeat sustained by the combined Hindu forces in the memorable battle of Tālikōṭa and the merciless devastation of the capital town of Vijayanagara by Muhammadan desperadoes, it must be said to the credit of the Karnāṭa kings that they did not allow their prestige as emperors of the vast Vijayanagara kingdom to suffer in any appreciable degree. Following closely in the footsteps of their illustrious predecessor the great Kṛishṇarāya, they seem to have upheld a liberal policy which conduced towards bringing peace and plenty into the kingdom. We have seen how the foreign travellers Ibn Batuta, Nicolo de Conti, Abdur Razzak, Nuniz and Paes, by their accounts of the Vijayanagara empire in the different periods of its history have supplied us, to a considerable degree, with reliable and authentic information of the contemporaneous kings of that dynasty and of their times. The same must be said of Gaspar, Correa, Manuel Barradas and Cæsar Frederic whose valuable notes greatly help us in unravelling a portion at least of the history which followed the death of Sadāśiva, the last of the second or Tuḷuva dynasty of Vijayanagara kings. Literature and inscriptions remain nevertheless to be the main sources from which we derive any correct or connected account of the period under reference.

In the concluding paragraphs of my thesis on the kings of the second Vijayanagara dynasty, I have discussed at full length the nature of the intrigues that followed the death of Achyuta and the eventual elevation to the throne of Sadāśiva

by his brother-in-law, the powerful Rāmarāja. It was also there stated that Rāmarāja was the *de facto* ruler of the Vijayanagara kingdom in the time of Sadāśiva and that the family to which he belonged had several collateral branches of semi-independent chiefs who were holding their fief from Sadāśiva, or rather from the all-powerful regent Rāmarāja himself. Practically therefore what could be said of Rāmarāja and his rule,¹ was collated in the paragraphs under reference, *viz.*, his conquests in various directions, the progress made by Telugu literature in his time,² the spread of Vaishṇavism, etc. Like the minister Narasaṇa-Nāyaka, the founder of the Tuluva dynasty, Rāmarāja began his career as the chief officer of State and the guardian of the puppet king Sadāśiva, and having like Narasaṇa brilliantly fulfilled that function he or his successors were evidently tempted to usurp the kingdom which subsequently they did. One point in favour of Rāmarāja's right to take such an extraordinary step, which Narasaṇa-Nāyaka had not, was his close relationship to Sadāśiva as his sister's husband.

During the regency of Rāmarāja, his two brothers Veṅkaṭādri and Tirumala held apparently as stated by Caesar Frederic the subordinate positions of commander-in-chief and chief minister respectively, in the Vijayanagara kingdom. Mr. Sewell refers to a rebellion by these two brothers about Śaka 1471 and the capture by them of the fortress of Adoni. It is doubtful how far this statement made on the authority of Muhammadan historians is to be accepted as a fact. During the battle of Tālikōla Tirumala (called also "Yeltumraj" by Ferishta) helped his brother by commanding a detachment of forces, having been deputed by him to block the passage of the Kṛishṇā at all points; and so also did Veṅkaṭādri. It is again reported that Tirumala was the only brother who survived the battle of Tālikōṭa³ and that he ran away to Penugonḍa with king Sadāśiva carrying thither the

¹ A copper-plate record at Dēvarāyadurga (*Ep. Carn.*, Vol. XII, Tm., 44) explicitly states that Rāmarāja was reigning supreme at Vijayanagara in Śaka 1484. Ferishta records that Rāmarāja summoned for the battle of Tālikōṭa "all his dependents and Rajas from the banks of the Kṛishṇā as far as the island of Ceylon." In Ci. 62 of *Ep. Carn.*, Vol. VII, which is dated about the end of the Śaka year 1487, Raktākshi, *i.e.*, just before the battle of Tālikōṭa, he is represented with all imperial titles to have been ruling as royal regent at Vidyanagari in the Kuntala country which was in extent a 'one lac and twenty-six thousand' province situated in the centre of Jambūdvīpa (India). Kuntala thus appears to be identical with Karpāṭa or to have included the latter as one of its subdivisions. Sadāśiva was ruling over Karpāṭaka, Telugāṇa and Drāviḍa as stated in Sd. No. 2 of the Kolar district. Evidently, the divisions here referred to were meant to denote broadly the countries in which Kannaḍa, Telugu and Tamil were spoken. Perhaps Karpāṭa included the portion of Kuntala where Kannaḍa was spoken.

² The shelter afforded by Rāmarāja to the Golconda prince Ibrahim Qutb Shāh, made the latter a good friend of the Hindus and a patron of their literature. Some fine Telugu poems are dedicated to him; see above A.S.R. for 1908-9, p. 198, footnote I. Sanskrit literature too must have advanced equally well under the patronage of Rāmarāja. The *Svaramēlakaṭāṇidhi*—an extract from which was kindly supplied to me by Rai Bahadur V. Venkayya—is a work on Hindu music written by a certain Rāmāmātya who was evidently in the service of Rāmarāja and built for him a palace called *Ratnakūṭa*. Rāmāmātya speaking of himself says in this poem that he received from Rāmarāja the chiefship of Koṇḍaviḍu. The *Svaramēlakaṭāṇidhi* supplies also some interesting historical information which confirms the statements already made about Rāma and his two brothers. It records that Rāmarāja was the son of Śrīraṅgarāja (*i.e.* Raṅga I) and that he married a daughter of Kṛishṇarāja. He was a devotee of Veṅkaṭēśa, the god on the mountain Tirumala. With his two brothers Timmarāja and Veṅkaṭādri, Rāmarāja is stated to have marched from Vidyaṣpura (*i.e.*, Vijayanagara) sword in hand and to have rescued the helpless Sadāśiva who was then evidently imprisoned by his enemies in the fortress of Gutti. Next he placed Sadāśiva on the Karpāṭa throne after defeating all the treacherous chiefs that opposed his succession.

³ But Ferishta says that Veṅkaṭādri escaped from battle to a distant fortress. The Kṛishṇāpūram plates which are dated in Śaka 1489, *i.e.* four years after the battle of Tālikōṭa refer to Tirumala as having succeeded to rule the 'whole earth' subsequent to the death of Rāmarāja and state that Veṅkaṭādri, his younger brother was 'resplendent on earth' as a hero and a conqueror. It may, therefore, be inferred that Veṅkaṭādri escaped with life from the battle of Tālikōṭa and was very likely helping his brother Tirumala in the administration of the country; see below, p. 179.

celebrated jewelled throne of kings and immense royal treasures. If this is true, he must have abandoned the city of Vijayanagara to the mercy of Muhammadan soldiers. According to Cæsar Frederick, however, Tirumala tried to repopulate the deserted city, but does not appear to have been quite successful in his attempt. During the lifetime of Sadāśiva—and we have his inscriptions dated up to at least the beginning of Śaka 1492 (=A. D. 1570)—the three brothers Rāmarāja, Tirumala and Venkaṭādri continued to rule only as feudatory *Mahāmaṇḍalēśvaras*. After the battle of Tālikōṭa in which Rāmarāja died and subsequent to the demise of Sadāśiva, Tirumala seems to have actually usurped the kingdom. It is not impossible that he may have had a hand also in hastening the death of the old emperor.

We have not many references in lithic records to Venkaṭādri. He was in Śaka 1480, apparently in charge of the country round Tiruvaīyāru near Tanjore.¹ In Śaka 1486, *i.e.*, a year or two before the battle of Tālikōṭa, the *Mahāmaṇḍalēśvara* Venkaṭādrirāja-Mahā-arasu (evidently the brother of Tirumala) is stated to have been 'ruling the whole kingdom' as a subordinate of king Sadāśivarāya and, in that capacity, to have conferred the governorship of Bārakūra-rājya on Keḷadi Sadāśivarāya-Nāyaka. We have perhaps to understand from this that Venkaṭādri, like his brother Tirumala, was also one of the *Mahāpradhānas* (ministers) of Sadāśiva. The Viḷāpāka and the Koṇḍyāta grants speak of him as having been a help-mate to his brother Rāmarāja (on the battle field) 'verily as Lakshmaṇa was to the epic hero Rāma.' The Kaḷḷakurśi grant states that Venkaṭādri was a great hero and a patron of poets like king Bhōja of old.² *Rāmarājīyam* or *Narapativijayamu*, a Telugu poem purely devoted to the description of the Karnāta kings descended from Brahmā and the Moon, after continuing the line of Tirumala down to Rāma IV,³ takes up the branch which issued from Venkaṭādri, and in doing this states that Venkaṭādri was a veritable Arjuna on the battle field, that he conquered Barīdu, that the combined armies of Nijāmu, Yēdulakhāna and Kutupuśāhu gave up altogether the hope of capturing him, that he ruled at Kandanōlu (Kurnool) and married two wives Raṅgama and Kṛishṇama, on whom he begot the two sons Ranga V. and Rāma. Thus we gather that Venkaṭādri was the governor of Kandanōlu for some time under his brother Rāmarāja and that he probably escaped with life, as already hinted by Ferishta, from the battle of Tālikōṭa in which the federation of the Dakhani Muhammadan kings Āli Barid, Hussan Nizam Shah, Āli 'Ādil Shah and Ibrahim Qutb Shah opposed the Hindus. The *Narasabhūpālīyam* also confirms these statements about Venkaṭādri and adds by way of pun that Ēdula-khānu (*i.e.*, Āli 'Ādil Shah) who was entitled Sapāda actually deserved that surname having displayed, as he did, his swift *foot* by running away from Venkaṭādri right up to the banks of the Bhīmarathī (river).

¹ No. 256 of the Madras Epigraphical collection for 1894. Venkaṭādri is here called *Mahāmaṇḍalēśvara* Rāmarāja-Venkaṭādrīdēva-Mahāśajjayan.

² This was perhaps with reference to the patronage offered by him to Tallapāka Tiruvengalaśtha, the author of *Paramayōgivilāsam*. The Svaramēlakalanīdhi of Rāmāmātya, quoted above, was written under orders of king Rāmarāja at the instance of Venkaṭādri. The title Bhōja is again applied to Tirumala I, brother of Venkaṭādri, in the Kṛishṇāpūṇam plates (*Ep. Ind.* Vol. IX, p. 338, v. 92). This was evidently the reason why Ferishta sometimes refers to Tirumala as Bhōj Tim Raj.

³ See *Ep. Ind.* Vol. III, Table facing p. 238.

From the Kṛishṇāpuram plates quoted above and the two Chitaldroog inscriptions already mentioned in connection with Rāmarāja,¹ it becomes plain that Tirumala I succeeded Rāmarāja in the administration of the kingdom immediately after the death of the latter in the battle of Tālikōṭa² and that Venkātādri, his younger brother, continued to serve Tirumala either as the governor of a province or as a military officer. From Śaka 1465 to 1473 the *Mahāmaṇḍalēśvara* Rāmarāja Tirumalayyadēva-Mahārāja (*i.e.*, Tirumala I) was himself in charge of Udayagiri.³ He was the governor of Kochcharlakōṭa-sīma in Śaka 1474 during the life-time of his brother Rāmarāja. Under Tirumala's orders in Śaka 1476 the Velugōti chief Komāra-Timmā-Nāyaningāru⁴ was governing the Nāgārjunikoṇḍa-sīma (Palnāḍ tāluka of the Guntur District). Evidently Tirumala must have been at head quarters at this time as one of the ministers of State. He must have also continued to occupy the same position in the Śaka years 1477 and 1480. The records of Voṇṭimittā to which these last quoted dates belong speak of Tirumala as Gutti Yara-Tirumalarājayya or Gutti Tirumalayyadēva-Mahārāja.⁵ The first of these alternate forms corresponds to Yeltumrāj of Ferishta. The attribute Gutti may indicate the division which was under his direct control and with which he was intimately connected as a military officer. He is called Gutti Tirumalarājayyadēva also in *Ep. Carn.* Vol. XII. Si. 31. From a Chedalavāḍa inscription of Śaka 1488, Krōdhana (A.D. 1565—66),⁶ we learn that Yara-Tirumalarājayya was enjoying the *jāghir* of Koṇḍaviṭi-rājya and that his agent there was the *Mahāmaṇḍalēśvara* Siddhirāju Raṅgaparājayya. Until Śaka 1492 current, Śukla, we do not find Tirumala assuming any imperial *birudas*. In this year he is stated to be 'ruling the earth' with the title *Mahārājādhirāja* added to his name.⁷ No. 497 of the Madras Epigraphical collection for 1905, which is dated in Śaka 1493, Prajāpati, calls him *Virapratāpa* Tirumalaiyadēva-Mahārāja. The Tumkur copper plates,⁸ dated in this same year, mention his queen Channamadēvi and devote a series of verses to describe the king's glory. They attribute to him the titles Manni-

¹ *A. S. R.* for 1908-9, p. 199.

² The battle of Tālikōṭa and the death of Rāmarāja must have occurred between the month Māgha (December-January) of the cyclic year Raktāksha (Śaka 1487) when Rāmarāja was still ruling as the royal regent, and the month Kārttika (September-October) of Krōdhana (Śaka 1488) when, according to a record from the Kolar district (*Ep. Carn.* Vol. X, Gd. 52), Tirumala was the chief officer of State. Ferishta gives the date January 25, A.D. 1565.

³ *Nellore Inscriptions*, U. 30 and N. 104.

⁴ This chief was also the subordinate of the next king Raṅga II.

⁵ *Nellore Inscriptions*, N. 112, also calls him Yara-Timmayadēva-Mahārāja. The poem *Narasabhūpāliyam* likewise refers to him as Yara-Timma and attributes the titles Chālukya-Nārāyaṇa and Birudairannevibhāla. The village Yerratimmarājucheruvu in the Gooty tāluka of the Anantapur district was perhaps called after Yarra-Timma who is stated to have been ruling the country round Gooty in the time of Rāmarāja. The form Hire-Timmarāja mentioned in the Kanarese records attributable to him, must be a corruption of Yara-Timmarāja.

⁶ *Nellore Inscriptions*, O. 29.

⁷ *Ep. Carn.* Vol. XII. Mi. 10.

⁸ *Ep. Carn.* Vol. XII. Tm. 1. The Būdhāla copper-plates from the Nelamaṅgala tāluka of the Bangalore district also belong to the time of Tirumala, but are dated in Śaka 1473, Virōdhikpit. Strangely too, they do not mention Sadaśiva who must have been ruling at the time or even Rāmarāja who was surely at the head of the administration. The plates abruptly begin after the usual invocations with the verse *triśhu Śrīraṅga*, etc., which describes Tirumala, one of the three sons of Śrīraṅga, as having been anointed for sovereignty like god Hari, in the Hindu Trinity. This verse is apparently, therefore, out of place in a record which bears the date Śaka 1473. Again the statements made in it of Tirumala's queen Channadēvi, of his coronation (*paṭṭābhishēka*), his great military prowess, his gifts at Kāñchi Śrīraṅga Śāshāchala, Kanakasabha, Ahōbala and other shrines and of the donations made in the presence of Rāmachandradēva (*i.e.* the Rāma svāmin temple at Penugōḍa), all point to the Būdhāla plates being wrongly dated, if, however, we could not presume them to be a distinct forgery.

yān-Sāmūl, 'the disgracer of Avahalarāya,' Gaṇḍaragūḷi, Manyapuli, 'the chief jewel in the garland of the city of Āravīṭi,' Dharanīvarāha, Antembavaragaṇḍa, Vēṅga-tribhuvanīmalla, Urigōla-Suratrāṇa, Chāḷikkachakravartī, Konarānikōṭalagoṇḍa, Oḍḍiyarāyadiśāpattā and Hindurāya-Suratrāṇa. Some of these at least have also been the titles of previous Vijayanagara kings. Elsewhere Tirumala is stated to have adorned the golden throne of Karnāṭaka and to have made a grant of a village in the Penugonḍa-rājya, which was a division of Hastināvati (*i.e.* Vijayanagara). The exact date when Tirumala transferred his capital to Penugonḍa is not certain. Inscriptions of Sadāśivarāya dated subsequent to A.D. 1565, the date of the battle of Talikōṭa, refer only to the king's rule from (the capital) Vidyānagarī (Vijayanagara). It therefore looks very unlikely that Penugonḍa could have become the declared capital before Śaka 1492, which is the latest available date for Sadāśiva.¹ Copper plate records of Tirumala and of the later Karnāṭa kings do not clearly state that Tirumala transferred the capital to Penugonḍa. A stone inscription, however, from the Shimoga district dated in Śaka 1493, Prajāpati² calls him 'the glorious king of kings, the great lord of kings, ruling the whole kingdom from his throne at Penugonḍi which belongs to Hampe-Hastināvati. Prajāpati was also the year in which Tirumala assumed the imperial titles as noted above. Consequently we may perhaps presume that the removal of the capital to Penugonḍa by Tirumala took place about Śaka 1493, *i.e.*, immediately after his actual usurpation of the Vijayanagara throne.³ Tirumalarāya does not appear to have ruled long. The earliest record of his son Raṅga II being dated in Śaka 1496,⁴ Śrīmukha, we may presume that Tirumala must have occupied the Karnāṭa throne for hardly two or three years after actually securing it. The Telugu poem *Vasucharitra* written by the poet Rāma-rājabhūshana, was, as already recorded, dedicated to Tirumala. It relates that the forces of Tirumalarāya when they destroyed the army of the Khāna, who was deputed (against him) by the king of the Yavanas (*i.e.* the Muhammadans) 'verily endowed upon the hills of Penagonḍa the *giriśabhāra* (*i.e.* the state of Śivahood or that of being the best of hills), by spreading thereon the skins of mad elephants and the skulls (of slaughtered soldiers).' We learn also from the same poem that Tirumala made his second son Raṅga (II) his heir-apparent and eventually retired from the Karnāṭa throne in his favour. This abdication by Tirumala is also hinted in the *Śrutirāñjanī*, a commentary on *Gītagōvinda*, of which Tirumala

¹ *Nellore Inscriptions*, N. 105. This record mentions a certain *Mahāmanḍalēśvara* Rāmarāja Sūlagaṇāyaya, who is perhaps to be identified with Raṅga IV, son of Ahiya-Rāmarāja, on the table of the third Vijayanagara dynasty facing p. 238 of *Ep. Ind.* Vol. III. It may be observed that at Vijayanagara itself we have no inscriptions of the dynasty subsequent to Śaka 1486 (A.D. 1564-5).

² *Ep. Carn.* Vol. VIII, Sb. 55.

³ Curiously enough a record of Śaka 1501 from Kuṇṇattūr (Chingleput district), which belongs to the time of Tirumala's son Śrīrangarāya speaks of the latter as ruling from his jewelled throne at Vidyānagara. Perhaps the traditional capital was occasionally mentioned out of regard which the kings still maintained for that town.

⁴ In his *Lists of Antiquities*, Vol. II, Mr. Sewell mentions an inscription with an earlier date, *viz.*, Śaka 1494 for Raṅga II. It is doubtful if this could be accepted; for in the same book we find later on the date Śaka 1495 for Tirumala, the father of Raṅga. The date Śaka 1499 given for Tirumala on p. 76 (*ibid*) belongs actually to the time of Raṅga (Nos. 336 and 341 of the Madras Epigraphical collection for 1901). A record from the Kolar district (Mr. 57), which is dated in this same year is distinctly stated to belong to the reign of Tirumaladēvarāya-Mahārāya who was ruling at Chandragiri. Perhaps this was prince Tirumala II, son of Rāma III, who was the governor at Chandragiri. Two other records of this same prince, styled only a *Mahāmanḍalēśvara*, come from the Mysore district (Sr. 39 and 40) and are dated in Śaka 1507, Pāṭhiva.

was himself the supposed author.¹ We are here told that Tirumala placed the heavy burden of administration on his four sons of high character and (retired from the kingdom) in order to keep company with the best of the learned and their learning.

The new capital Penugonda, which Tirumala preferred to substitute for the old Vijayanagara, was from early Hoysala times a military stronghold and the seat of a Viceroy. Bukka I, the founder of the Vijayanagara dynasty is reported to have ruled from Penugonda and Dōrasamudra simultaneously for a time and to have afterwards appointed his son Vira-Viruppanṇa-Oḍeyar to be in charge of the province Penugonda-rājya, of which Penugonda was the chief city. During the Śāluva usurpation and the regency of Narasaṇa-Nāyaka, Penugonda continued to be equally important. According to Nuniz, prince Tamarao was imprisoned and murdered at Penugonda with the connivance of Narasaṇa-Nāyaka. From lithic records we gather that the fortifications at Penugonda were constructed by Ananta-dēva-Oḍeya, a great minister of the Vijayanagara king Bukka I in Śaka 1276, Jaya (=A. D. 1354-5). In the time of Ranga II, the son of Tirumala, these fortifications were repaired and extended by an officer named Channappa-Nāyuḍu. The tradition that the teacher Kriyāśakti was the founder of the city of Penugonda proves the great reverence with which that holy person, already referred to in my account of the first dynasty, was looked upon by the rulers of the Vijayanagara kingdom and their ministers. The reputation of Penugonda under name Ghanagiri and its connection with the Vijayanagara throne seems to have continued down to A. D. 1856-7 when "the glorious *Mahārājādhirāja* Rājāsri Arbuthnot Sāhib born of the Hūṇa (*i.e.* European) race, was administering the five *parganas* beginning with the throne of the kingdom of Ghanagiri."

The chief feudatory families that owed allegiance to Tirumala, as before him they did to Sadāśiva and Rāmarāja, were: (1) the Nāyakas of Madura, (2) the Voḍeyars of Mysore, (3) the Nāyakas of Vēlūr, (4) the Nāyakas of Tanjore, (5) the Nāyakas of Keḷadi and (6) other chiefs who being relations of the royal family served as viceroys over different provinces. Brief accounts of some of them will be given at the end of this paper.

According to copper-plate records Tirumala had four sons, *viz.*, Raghunātha, Raṅga II, Rāma and Veṅkata I. Raṅga and Veṅkata, who actually ruled after Tirumala, are stated in the Viḷāpāka plates to have been the sons of Veṅgaḷāmbā. The Telugu poem *Rāmarājīyamu*, however, is explicit in stating that all the four were sons of Veṅgaḷāmbā. Queen Channamadēvi already referred to is not mentioned in *Rāmarājīyamu*, a work which is very particular in giving the names of the queens of the Kaṇṇaṭṭa kings and their issues. Perhaps Channama was not a queen in the accepted sense of the term. Raṅga II was the first to be crowned in the orthodox fashion to rule over Penugonda-rājya, which was evidently the name now conferred on the newly formed Vijayanagara empire. By this time, therefore, the town of Vijayanagara may be supposed to have been completely abandoned.

¹ From the colophon of a manuscript of this work preserved in the Tanjore library it looks as if Oherakūri Lakshmanasūri was the actual author (Dr. Hultzsch's Report on Sanskrit manuscripts No. III, p. 130. No. 2112).

Before speaking of Raṅga II, we may note that Raghunātha and Rāma, the two other sons of Tirumala, who did not succeed to the Karnāṭa throne, are also now and then referred to in inscriptions. A record from Kalumalla in the Cuddapah district mentions the *Mahāmaṇḍalēśvara* Karnāṭa Raghunātharājadēva-Mahārāja sanctioning certain terms of a contract to be followed by the accountants (*kaṛaṇa*) and the agriculturists (*kāmpu*) of that village. Rāmarājayya (Rāma III), son of the *Mahāmaṇḍalēśvara* Rāmarāja-Tirumalarājayya (*i.e.* Tirumala I) appears in an epigraph at Kollēgāla as a feudatory of Sadāśiva in Śaka 1491. He was ruling evidently the Hadināḍu-sīme in which a portion of the present Mysore district was included and is also mentioned in two records from Penugonḍa as enjoying the chiefship of that fortress and of the whole Penugonḍa-rājya under king Sadāśivadēva-Mahārāja, immediately after the battle of Tālikōṭa.¹

Raṅga II succeeded to the throne in or about Śaka 1496 Śrīrukha (= A. D. 1573-4).² Prior to this, he must have served, like other Vijayanagara princes, as a viceroy in one of the provinces. The few copper-plate records of his time found so far refer to his residence at Uddagiri (*i.e.*, Udayagiri) and his conquest from there of the inaccessible Koṇḍaviḍu, Vinikoṇḍa and other fortresses. This apparently is a reference to an event which must have happened prior to his coronation on the throne of Penugonḍa-rājya. Raṅga II is stated in Telugu literature to have fought with the Muhammadans, to have made his war-drums heard at the very gates of Vijapura,³ to have defeated the Gōlakonḍa warriors and 'brought back to life the dwindled power of the Karnāṭa empire.' His coronation at Penugonḍa is particularly recorded as having been performed 'by the best of Brāhmaṇas according to Śāstric injunctions.' During his reign, Veṅkaṭa I—the last of the four brothers—appears to have occupied the position of crown prince. The record at Kuṇṇattūr already referred to, registers a gift by the general (*dalavāy*) Gobbūri Tirumalai-Nāyaka for the merit of the king's younger brother Veṅkaṭapatidēva-Mahārāja. So also does an epigraph in the Triplicane temple, dated in Śaka 1507, when a gift was made by the same general for the merit of Rāmarāja-Veṅkaṭapatirāja, who is perhaps to be identified with Veṅkaṭa I. Three inscriptions from Śattuvāchchēri, Śampaṅginellūr and Perumai near Vēlūr call Raṅga the *Mahāmaṇḍalēśvara* Śrīraṅgadēva-Mahārāja, though by this time almost a full year must have elapsed after his coronation. A stone epigraph from Elvānāśūr in the South Arcot district attributes all the Vijayanagara titles to Raṅga II, and makes him also 'the conqueror of all countries!' Still another from Tiṇḍivanam in the same district adds 'that he received tribute from all countries and from Iḷam (Ceylon), that he subdued the insolent *Kaḷḷar* and *Maṇavar* (tribes) inhabiting Koṅgu and Malai-nāḍu and that (robbing them of)

¹ It will be seen below that Tirumala II, son of Rāma III, was the Vijayanagara Viceroy at Seringapatam in whose time Rāja-Voḍayar of Mysore rose to prominence.

² In his "Chronology of Modern India" (p. 47) Dr. Burgess registers the succession of Śrī-Raṅga II to the throne of Pennakoṇḍa in A. D. 1575.

³ The verse from the *Narapativijayamu* or *Rāmarājīyamu* quoted above on p. 197 of *A. S. R.* for 1908-9 as referable to Raṅga I., has been found on examination of the original to refer to Raṅga II, the son of Tirumala. The last epithet about the dwindled Karnāṭa empire now becomes quite intelligible inasmuch as the battle of Tālikōṭa and its after effects had completely ruined the continuity of the Vijayanagara rule.

their treasures he distributed (the same among the poor).’ This record has a peculiar interest attached to it in as much as it fixes the voluntary contributions (*magamai*) paid by the principal inhabitants, the merchants whose business extended over the ‘fifty-six countries and the eighteen districts’ and others who gathered together on each Wednesday market held at Giḍaṅgil, in order to carry out repairs, in the Tiṇḍiśuramudaiya-Nayinār temple at Tiṇḍivanam.¹

The inscription at Elvānāsūr attributes to Raṅga II, the title Virakēsari and his records at Penugonḍa give his name as Vira-Śrīraṅgadēva-Mahārāya. According to copper-plate inscriptions Raṅga II appears to have married Tirumaladēvī and Kṛishṇāmbā; but the *Rāmarājīyam* mentions only the former under the name Timmamāmbā. Reference has been made already to the military officer Channappa-Nāyuḍu and to the repairs and extensions carried out by him to the fort of Penugonḍa. This information is registered in an epigraph engraved on the south wall of the Āñjanēya temple at the North gate of the fort at Penugonḍa. The record which is dated in Śaka 1499, Dhātṛi (=A.D. 1576-7) *i.e.*, a decade after the battle of Tālikōṭa, is very interesting and gives us a peep into the events that preceded and succeeded that decisive contest. In the year Piṅgaḷa corresponding to A.D. 1557-8, Channappa-Nāyuḍu, a *chauri*-bearer of Vira-Tirumaladēva-Mahārāya (*i.e.* Tirumala I),—at the time while Tirumala had occupied the town of Penugonḍa-paṭṭana and was ruling it—, built under orders of that heroic prince, a dwarf fort (*pilla-kōṭa*) within the big fort, erected fort gates, added bastions, dug trenches, *etc.*, and lower down the big fort he renovated the (already existing) hill fort; by the grace of his family god Channarāya of Mārakāpura (*i.e.* Mārakāpur in the Kurnul district) whom he had established at Penugonḍa,² he defeated in the Pausa month (November-December) of Kshaya (=A.D. 1566-7) (the Muhammadan general) Rambikēsaru-Khānu; in the Vaiśākha month (March-April) of Vibhava (=A.D. 1568-9) he defeated Vambinamāli-Khānu and other (Muhammadan) generals (*sardāru*); and in the Mārgaśīra month (October-November) of Dhātṛi (=A.D. 1576-7) he conquered Yēdula-Śāhi who had come (to capture Penugonḍa). The curious imprecation at the end of the record states that Penugonḍa-paṭṭana is a god-built city and no man could possibly boast of conquering its surrounding fortifications. Evidently, therefore, it becomes clear that Tirumala I was in charge of Penugonḍa before the battle of Tālikōṭa was fought and that subsequent to it, his general Channappa-Nāyuḍu successfully defended the stronghold against continued attacks by Muhammadans in the years 1566-7, 1568-9 and 1576-7. This justifies the boast of both Tirumala and Śrī-Raṅga II, often recorded in Telugu literature, of having fought with the Muhammadans and defeated them. Rambikēsaru Khānu and Vambinamāli Khānu must have been the generals of the united Muhammadan forces who, knowing that Tirumala with the puppet king Sadāśiva had taken shelter at Penugonḍa, must have pursued him

¹ See *Annual Report on Epigraphy* for 1905, p. 60, paragraph 35. The items on which *magamai* was collected are stated to be: — $\frac{1}{2}$ *kāṣu* on each shop opened in the market; 1 *kāṣu* on each *podu* of paddy; 2 *kāṣu* on each *podu* of gingili-seeds; the same on each *podu* of cotton and of jaggery; 1 *kāṣu* on each *podu* of coconuts or of plantain fruits; 2 *kāṣu* on each *podu* of areca-nuts or of pepper; $\frac{1}{2}$ *kāṣu* on each *podu* of salt; 2 *kāṣu* on each *podu* of dried fish; 1 *kāṣu* for each set of 5; 1 *pana* for each *tāru* of cotton, *etc.*

² Madras Epigraphical collection for 1901, No. 341. To this temple built by the famous general Channappa-Nāyuḍu, villages were granted by Tirumala (I) and his sons Raghunātharājaya, Śrīrangarāja (II) and Rāmarāja (III).

and besieged the fortress, though no such immediate attack is mentioned by Ferishta. Among the generals who commanded the combined Muhammadan army at the time we find names like Kishwar Khān and Roomy Khān, both of which may be found combined in the name Rambikēśaru Khānu. Whom the other name Vambinamāli Khānu denotes, I am not able to say. The capture of Penugonḍa by Yēdula-Śāhi in A.D. 1576-7 is a historical event also recorded by Ferishta. In this campaign Ally Adil Shah (Yēdula-Śāhi) of Beejapoor attacked Penukonḍa on which account Venkaṭādri (perhaps Venkaṭa I) "committing the place to the care of one of his nobles retired with his treasures and effects to the fortress of Chandurgeery." The siege which continued for three months was eventually raised for want of provisions.

Raṅga's policy towards the Muhammadans must have been one of continuous contest. The taking of Udayagiri, Koṇḍaviḍu and Vinikonḍa mentioned in his copper-plate records, must evidently have been from his enemies the Muhammadans, who, according to Ferishta, attempted to deprive the Hindu king of his northern possessions. Ally Adil Shah of Beejapur "proceeded south to attack the country of Beejanuggur and wrest it out of the hands of Sree Runga Ray."¹ The latter sought the aid of Ibrahīm Qutb Shah of Golconda.² Some time after, however, a campaign was arranged by this same Qutb Shah against the Vijayanagara dominions for a supposed remissness in the payment of tribute on the part of some Hindu governors at Koṇḍaviḍu and other provinces. This was perhaps also the occasion when Raṅga II took back from the Muhammadans the fortresses of Udayagiri and Vinikonḍa. The conquest of the Hindu kings south of the Kṛṣṇā by Ibrahīm Qutb Shah, is described in detail in a Telugu inscription near the Durgi temple on the hill at Amīnābād (Guntur district). I have elsewhere given a complete extract from it which shows that Ibrahīm captured in Śaka 1502 (=A.D. 1580) the hill fortress of Uddagiri (Udayagiri) (which was then perhaps in charge of Raṅga's brother Venkaṭa I), Vinikonḍa, Bellamkonḍa, Taṅgeḍa and the country included in them. He also took Koṇḍaviḍu, the capital of the Kaṛṇāṭa viceroys.

Raṅga II was a patron of poets after the fashion of his ancestors—his court-poet being Rāyasam-Venkaṭapati, who wrote the *Lakṣmīvilāsam*. From literature we gather that Pemmasāni Pedda-Timmarāja was a minister of Śrī-Raṅgarāja, and continued to hold the same office also under Raṅga's brother Venkaṭa I. Śrī-Raṅgarājayya, son of Salakarāja-Chikka-Tirumalarājayya, who having opposed the succession of Sadāśiva was uprooted by Rāmarāja, appears also to have served as Raṅga's feudatory in some part of the Kolar district. The subordinates of Tirumala mentioned on p. 182 above, continued to acknowledge Raṅga II as their overlord, and we gather from inscriptions that on the west coast in Śaka 1502 the governor at Bārakūr was a certain Achchappa-Oḍeya.³

¹ Colonel Briggs' Translation, Vol. III., p. 434.

² The Telugu poem *Yayāccharitramu* by Ponnikaṇṭi Telaganna which was dedicated to Amīn Khān, one of the military officers of Ibrahīm Qutb Shah, states that Phājila Khān, the son of Amīn Khān went to the court of Śrī-Raṅgarāja (i.e. Raṅga II) and brought about a diplomatic alliance between him and the king of Golconda; *Lives of Telugu Poets*, p. 257.

³ It is somewhat significant that Bhairava II, the Jaina chief of Kalasa-Kāṭkala-rājya, whose Kāṭkala record is dated in Śaka 1508 and falls into the reign of Raṅga II, does not acknowledge the sovereignty of that king. Evidently the whole of the West coast and its petty rulers had been assuming independence. An attempt on the part of Ally Adil Shah to subdue them was practically a failure; Briggs' Ferishta, Vol. III, p. 141.

Venkaṭa I was by far the most famous and perhaps also the most powerful king of the dynasty. A large percentage of the Vijayanagara inscriptions of this period (both on copper and stone) belong to his reign. In the earlier years he seems to have served his elder brother Raṅga II as viceroy, being placed by him in charge of Udayagiri, Koṇḍaviḍu and other outlying hill fortresses. We have seen above how Ibrahīm Qutb Shah of Golconda in Śaka 1502 (=A.D. 1580) acquired these fortresses by driving out from them Venkaṭapatirāja, by which undoubtedly Venkaṭa I is meant. It was perhaps thus that Venkaṭa came to entertain a bitter hatred for the Sultans of Golconda and inflicted, as stated in copper-plate records, a crushing defeat on Mahamanda-Śāhu (*i.e.*, Muhammad Quli Qutb Shah, son of Ibrahīm). The Aminābād inscription quoted above states further that in Śaka 1514, Nandana (=A.D. 1592-3) certain Hindu and Muhammadan chiefs on the south side of the river Kṛishṇā, *viz.*, Ballērāyaṇḍu¹, Sābāji, Alamakhānuḍu, Khānakhāna and others rebelled against the Government at Golconda and became unruly. Muhammad Quli sent his minister Malka Aminu Malka to punish the rebels. Amin Malka crossed the river Kṛishṇā with a large Gōlakoṇḍa army and drove away the enemies before him as darkness before the rising sun. All this evidently happened while Venkaṭa was ruling the Vijayanagara kingdom. Venkaṭa's chief victory is described in copper-plate records in the following terms:—"Forcibly deprived of troops of horses and elephants, weapons, parasols, etc., at the head of a battle by the excellent soldiers of the army of this powerful king (Venkaṭa), the son of Malikibharāma, *viz.*, Mahamanda-Śāhu reaches (his) house in despair; (and) being reduced (*manda*) in lustre (*maha*) he thus daily makes (his) name significant." It looks, therefore almost certain that the defeat herein recorded as having been inflicted on Muhammad Shah must be in connection with the attempt on the part of the Karnāta king to recover the outlying fortresses on the south of the Kṛishṇā river, which had evidently been lost to him. Whether these fortresses came back permanently or not into the possession of the Hindu king remains, however, doubtful. The Aminābād record is plain in stating that "Amin Malka made a victorious march through the country, punished the wicked and protected the good." This account of the conflict of Venkaṭa with the Sultan of Golconda and of the rebellion of petty potentates south of the Kṛishṇā, against the Golconda government is confirmed by Ferishta, who describes the frequent attempts of Venkutputty to invade the Golconda dominions and the rebellion of the *Jageerdars* Alum Khan Patan, Khan Khanan, Sabajee Marratta and Bala Row. The Telugu poem *Rāmarājīyamu* describes Venkaṭa as having 'terrified the son of Ibharāmu (*i.e.* Ibrahīm) at Gōlakoṇḍa, by his large army, to have dispersed his forces, defeated a number of enemies at Nandēla (Nandyal) and established a capital at Vēlūr'. This last item of information accounts perhaps for the name Rāya-Vēlūru, which is still applied to Vellore (Chittoor district).

Before entering into other details of the reign of Venkaṭa, we have to examine two stone records of a certain Vīravasantarāja, from the Salem and North Arcot

¹ In the *Annual Report on Epigraphy* for 1910, p. 120, I read this name as Challērāyaṇḍu instead of Ballērāyaṇḍu and made a single name of Sābāji Alamakhānuḍu instead of dividing it into two. The correct readings given above are adopted on the strength of the information supplied by Ferishta (*Briggs*, Vol. III, p. 460).

districts both of which are dated in Śaka 1490, Vibhava.¹ The former states that this date corresponded to the 3rd year of the king. The Vijayanagara *birudas* attributed to Viravasanta in these records coupled with the fact that a set of copper-plates from Tinnevely dated in Śaka 1514 (which falls into the reign of Venkaṭa I) mentions a throne (*pīṭha*) of the local deity called *Bhujabala-Viravasanta-Venkaṭadēva-Mahārāja* evidently after the name of the ruling king, lead to the conclusion that Viravasanta may have been a title borne by Venkaṭa I and that the Śaka year 1490 corresponding to the 3rd year of his reign may consequently signify that Venkaṭa ascended the throne (as perhaps a crown prince) in Śaka 1488 while yet Sadāśiva was alive. It may be noted that among the titles of Viravasanta appears also the usual boast that he “conquered and levied tribute from Laṅkāpurī (Ceylon).” It is thus clear from the Tinnevely epigraph that Viravasanta must have been a recognised *biruda* of Venkaṭa. Whether those from Salem and the North Arcot districts do refer to Venkaṭa or not, still remains doubtful. In an inscription from Mārkaṭpūr, of Śaka 1489 Venkaṭa appears as a subordinate of Sadāśiva, as may be inferred by the title *Mahāmaṇḍalēśvara* which he there receives. No inscriptions of Venkaṭa with the titles of a supreme sovereign, are discovered prior to Śaka 1505. But as Raṅga’s records go up to Śaka 1507, Pārthiva (=A.D. 1585-6) it is not impossible to suppose that Venkaṭa continued to be the crown prince down to 1507. In some of the copper-plate records belonging to his reign, Venkaṭa is distinctly stated to have occupied the throne only after the *death* of Raṅga II. Venkaṭa’s coronation was performed by the Vaishṇava teacher Tātayārya, generally known as Tirumala Tātāchārya or Kōṭikanyādānam Tātāchārya.²

Venkaṭa married five wives, whose names according to the Viḷāpāka grant were (1) Venkaṭāmbā, (2) Rāghavāmbā, (3) Ped-Ōbamāmbā, (4) Kṛishṇamāmbā and (5) Koṇḍāmbikā. The *Rāmarājīyam* omits to mention the second and states that (3) and (4) were daughters of two different chiefs of the Jilleḷa family and that (5) was the daughter of Gobbūri Ōbarāja. A few copper-plates of Venkaṭapati from the Mysore State, mention Pin-Ōbamāmbā instead of (4) Kṛishṇamāmbā and omit Koṇḍāmbikā altogether.³ The *Rāmarājīyam* is silent about Venkaṭa’s issues. It speaks, on the other hand, of the two sons of Venkaṭa’s elder brother Rāma, *viz.*, Tirumala II and Raṅga III, who are also mentioned in copper-plate records. It tells us that of these two, the latter was crowned *yuvārāja* being henceforth also entitled Chikkarāja. This statement is an indirect hint that Venkaṭa had no issue of his own to succeed him on the throne. The story of Barradas translated by Mr. Sewell on pp. 222 to 231 of his *Forgotten Empire*, lends support to what has been stated above on the authority of the Telugu poem *Rāmarājīyam*. The intrigues in the royal family subsequent to the death of Venkaṭapatirāyalu, the appearance of Chikkarāya on the scene, the opposition to his succession offered by certain rebellious chiefs under the leadership of Jaggarāya, the eventual installation of Chikkarāya on the Karnāṭa throne by the Venkaṭagiri chief Echama-Nāyaka and the continuance of this war of succession in the farther south where, the Nāyakas of Madura and of

¹ *Annual Report on Epigraphy for 1900*, p. 31, paragraph 82.

² See above, *A. S. R.* for 1908-9, p. 196, footnote 7, and below, p. 188.

It may be noted that Barradas mentions also queen Bayamā, the daughter of Jagarāya

Tanjore as feudatories of the Vijayanagara throne took up the side of either Jaggarāya or the son of Chikkarāya who became now the rightful heir, are so vividly depicted in this foreigner's account as to carry historical conviction. Chikkarāya herein referred to is identical with Raṅga III whom Veṅkaṭa, as we have seen already, chose to be his crown prince and eventual successor. According to Barradas also the succession passed on from Veṅkaṭa to Raṅga III and shortly after, to the latter's middle son¹ Rāma IV, who, it appears, was the only son that survived the tragic massacre of the royal family perpetrated at the instance of the infamous Jaggarāya. These events are mostly confirmed by the Sanskrit poem *Sāhityaratnākara* which was dedicated to one of the Nāyaka chiefs of Tanjore.² Jaggarāya, who was the cause of all the troubles subsequent to the death of Veṅkaṭa I, is stated by Barradas to have been the father-in-law of Veṅkaṭa, but is referred to in the *Rāmarājīyam* only as an enemy of Rāma IV and of his younger brothers Śiṅga, Rāyappa, Ayyana and Ohanna. Jagga's associates are stated in the same poem to have been his own brother Cheñchu-Vīrappa and the two friends Yāchana and Māka.³

The literary activity which was displayed during the reign of Veṅkaṭa was an extraordinary one. The Vaishṇava teacher Tirumala Tātāchārya both as a writer and an ardent Vaishṇava missionary, contributed largely to the progress of Vaishṇavism under the royal patronage of his direct pupil, the Karnāṭa king Veṅkaṭapati. Stone inscriptions engraved on the walls of the Arulāḷa-Perumāl temple at Little Conjeeveram disclose the fact that Tātāchārya was a learned Brahman of Eṭṭūr and was placed by Veṅkaṭapati to be in sole charge of the repairs carried on in that temple about this period. Contemporaneous with Tātāchārya, was another Vaishṇava teacher, *viz.*, Kandāḷa Appalāchārya, who was equally famous. The poet Tenāli Rāmakṛishṇakavi, whose wit and wisdom are praised even to-day by students of Telugu literature, was also living about this time, though it is not certain if, actually, he was the court poet of Veṅkaṭa. Other Telugu poets were Chinna Nāraṇakavi, Tarigoppula-Mallana and Maṭṭa Ananta.⁴ Veṅkaṭa's minister was Pemmasāni Pedda Timmarāja whose younger brother Chinna Timmarāja was also the patron of a Telugu poet. To these may be added the name of the famous Śaiva Advaita philosopher Appaya-Dīkshita whose direct patrons were the subordinate chiefs—the Nāyakas of Vellore. The chief military officer of Veṅkaṭa was Gobbūri Ōbarājayya perhaps identical with Ōbōrāja, the brother-in-law of Veṅkaṭa as mentioned by Barradas, or his

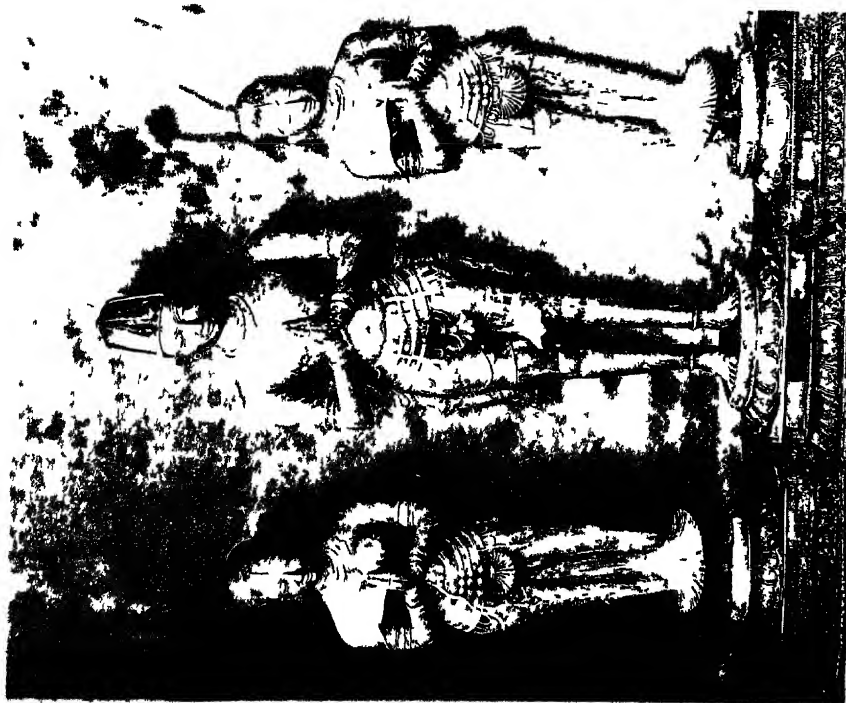
¹ The *Rāmarājīyam* makes him the eldest of the five sons.

² Mr. T. S. Kuppasvami Sastri's Tamil pamphlet entitled 'A short history of the Tanjore Nāyaka Princes,' p. 7f.

³ Yāchana herein referred to is evidently different from Ēchama-Nāyaka who was supporting the cause of prince Raṅga III and could not, as such, be also a friend of Jaggarāya. Māka may have been one of the Kārvēṭnagar chiefs who were subordinate to Vijayanagara.

⁴ Dāmera Veṅkaṭapati, the author of the *Bahulāśvacharitra*, is stated by Rao Bahadur Virēśalingam Pantulu to have been a nephew of the Veṅkaṭagiri chief Yāchama (Ēchama)-Nāyudu who was the opponent of Jaggarāya and the recipient of a generous gift from Veṅkaṭapatirāya (Veṅkaṭa II). The English factor who obtained from Veṅkaṭa II about A. D. 1640, a grant of land upon which the modern Fort St. George is built, states that the country surrounding Madras was the property of a chief called Dāmarla Veṅkaṭapati who was very powerful and ruled over the coast line between Pulicat and St. Thome. As the poet Dāmera Veṅkaṭapati also belonged to a ruling family it looks very probable that he is identical with the chief Dāmarla Veṅkaṭapati. If so, the latter must have lived at a period some time later than that to which Mr. Virēśalingam assigns him.

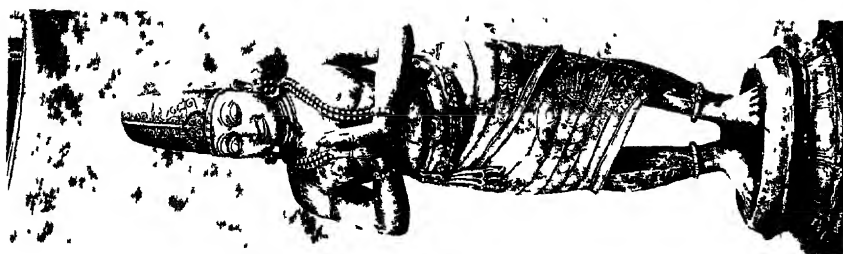
THE THIRD VIJAYANAGARA DYNASTY: ITS VICEROYS AND MINISTERS.



(Fig. 1.) CHINNADEVI.

(Fig. 2.) KRISHNARAYA-MAHARAYA.

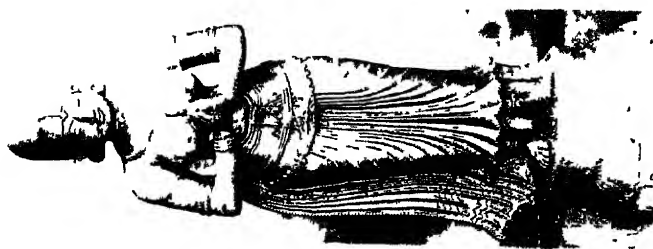
(Fig. 3.) TIRUMALADEVI.



(Fig. 4.) VENKATAPATTEBAYA.



(Fig. 5.) A KING,
PERHAPS TIRUMALA.



(Fig. 6) HIS QUEEN,
PERHAPS VENGALAMBA.

father-in-law as stated in the *Rāmarājīyam*. Venkaṭa appears to have issued a gold coin which was known as the *Veṅkaṭarāya-varāhan*. This coin is described by Professor Hultzsch on p. 307 f. of *Indian Antiquary*, Vol. XX.¹ Copper-plate inscriptions of the time of Venkaṭa invariably bear the signature *śrī Veṅkaṭēśa*. As the grants registered herein are also stated to have been made in the presence of the god Venkaṭēśa on the hill at Tirumala, it is inferred that the king must have changed his capital from Penugoṇḍa to Chandragiri, a town close to Tirupati. But no direct statement to that effect has been made in any of the inscriptions copied so far.² A copper statue of Venkaṭapatirāya (Venkaṭa I) labelled in clear Telugu characters of that period still adorns the right side of the entrance into the Veṅkaṭēśa-Perumāl temple on the Tirumala hill and indicates the great devotion the king had for that deity.³

Venkaṭa's latest record is dated in Śaka 1539 and corresponds to A. D. 1617-18. Two epigraphs from the Kolar district which are respectively dated in Śaka 1538 and Śaka 1539 refer to the ruling sovereign as Rāmadēva or Rāmchandra, *i.e.*, Rāma IV. It is consequently doubtful if the Trichinopoly record first quoted could be accepted as belonging to the reign of Venkaṭa I. Besides, it is generally presumed that Venkaṭa died in or about A.D. 1614. The European traveller Floris heard of his death while at Masulipatam, on October 25th of that year. We find from the sequel that in this very same year Venkaṭa's grand nephew Rāma IV. is stated to have been ruling at Penugoṇḍa with the imperial titles *Rājā-dhīrāja* and *Rājaparamēśvara* and the epithet *Mahāmaṇḍalēśvara*.

It cannot be stated with any degree of certainty what time might have elapsed between the death of Venkaṭa and the establishment of Rāma on the throne of Penugoṇḍa. The unfortunate Ranga III., who is reported to have been murdered in prison, is mentioned in a record from the Tumkur district which is dated in Śaka 1521, Vikārin (=A.D. 1599-1600), to have been 'ruling.' We have perhaps to understand by this that he was 'ruling' only as a crown prince. Another record from the same district, dated in Śaka 1537, Ānanda represents him again as a ruling king in the Āsvayuja month of that year. But Rāma IV.,⁴ his son, was reigning in the Kārttika month of the same year. Hence it appears as if the sad event of Ranga's murder must have occurred in the cyclic year Ānanda between Āsvayuja *ba. di.* 3 and Kārttika *śu. di.* 15. The elder brother of Ranga III. *viz.* Tirumala was also ruling, in perhaps a subordinate capacity, under Venkaṭa I in some part of the modern Mysore State. For, two records from the Mysore district refer to grants made by him to a chief of Hadi-nāḍu. The direct ancestors of the present line of Mysore kings were also subordinate to Venkaṭa I. They are stated to have

¹ *Annual Report on Epigraphy for 1911, Part II, paragraph 58.*

² On p. 126 of his *Lists of Antiquities*, Vol. I., Mr. Sewell refers to a stone record at Vaikuṇṭa which is dated in Śaka 1525 and mentions "Venkaṭapati of Vijayanagara (ruling) at Chandragiri." But a large number of Venkaṭa's inscriptions mention his capital Penugoṇḍa.

³ The accompanying plate is prepared from a photograph recently taken for that purpose. The stone images of a king and queen which are placed to the left of this copper statue do not bear labels. They may represent the parents of Venkaṭa, *viz.*, the first Karpāṣa king Tirumala and his queen Veṅgaḷāmbā. I avail myself of this opportunity to issue also with the kind permission of the Director General three other metallic statues preserved in the temple on the Tirumala hill and found to the right of Venkaṭapatirāya on the plate. The central figure represents the great Krishnarāya of the second Vijayanagara dynasty; to his right is his queen Chinnādēvi and to his left, queen Tirumaladēvi.

⁴ *Ep. Carn.* Vol. IX. An. 47.

received from him the country round Seringapatam as *vumbalige*, i.e., a tax-free tenure.

Rāma IV must have succeeded to the throne in the latter part of Śaka 1536-7, Ānanda. His rule was not apparently an eventful one. Ēchama-Nāyaka, who had been supporting the cause of Rāma, is said to have sought the assistance of Achyutappa-Nāyaka of Tanjore. Thereupon his opponent Jaggarāya contracted an alliance with the Madura Nāyaka who was ruling at the time and carried on a vigorous campaign against Rāma, Ēchama-Nāyaka, and their ally Achyutappa-Nāyaka.¹ The *Sahityaratnākara* states that Jaggarāya with the allied Pāṇḍya forces destroyed the bridge over the Cauvery and advanced against Raghunātha-Nāyaka, the son of Achyutappa-Nāyaka. But the latter came off victorious and brought the contest to a close by accepting in marriage a daughter of the Madura Nāyaka. Jaggarāya also appears to have acquiesced in the succession of Rāma; for we find Kumāra Immaḍi-Jagadēvarāya a minister's son of Rāṇa Peda-Jagadēvarāya (perhaps identical with the Jaggarāya under reference), making a grant as Rāma-dēva's subordinate, in Śaka 1545 (*Ep. Carn.* Vol. IX. Cn. 182).

Inscriptions referable to the time of Rāma come mostly from Mysore and range in date from Śaka 1536 to Śaka 1552. One epigraph from Nārāyaṇavanam in the Chittoor district mentions the ruling sovereign Viraveṅkaṭadēva-Mahārāya and is dated in Śaka 1544, Raudri (=A.D. 1621). It is perhaps to be presumed that this king is Veṅkaṭa II, the grandson by direct descent of the great Rāmarāja (Hemraj), and that he was already the elected crown prince.² The cause or causes that led to the change of line after Rāma IV., may have been similar to those that brought about the events immediately following the death of Veṅkaṭa I. Rāma IV may have died childless; or, for political reasons, may have been compelled to choose Peda-Veṅkaṭa (Veṅkaṭa II) as his crown prince in preference to his own sons or to those of his brothers. The *Rāmarājīyam* does not offer any clue on this point. After describing Rāma (Hemraj) and his two brothers it continues the line of Tirumala, the middle brother, down to Rāma IV (mentioning even then Veṅkaṭa I as the ruling king), goes on next to that of the last brother Veṅkaṭādri and finally comes back to the descendants of Rāmarāja (Hemraj) of whom a later member named Kōḍaṇḍarāmarāja was the patron of the poem. It thus appears that practically one king of each of the three lines ruled on the Karṇāṭa throne—Veṅkaṭa I being the most famous in the Tirumala line, Veṅkaṭa II in

¹ The contest between Ēchama-Nāyaka and Jaggarāya must have been a serious one. In his *Bahūśvacharitra* Dāmera Veṅkaṭapati, describing the prowess of his (paternal) aunt's son Velugōṭi Yāchama-Nāyaka, says:—"Can any (hero) equal Velugōṭi Yācha who near Uttaramallūr beat (the army of) Dāvalu Pāpa, captured (the fort of) Cheṅgalupaṭṭu (Chengleput) by escalading its walls, drove away Yatiāju (who had met him) near Pālemukōṭa, dispersed many heroic chiefs who opposed him at Tirumala, crushed completely Jaggarāṭ and his associates, deprived of their conceit the chiefs of Mathurā (Madura) and Cheṅji (Gingee) and expelled the ruler of Tiruchanāpalle (Trichinopoly)?"

² A stone inscription (with its duplicate on copper) comes from Ellore in the Kistna district and belongs to Raṅga VI, the adopted son of Gōpāla and the grandson of "Āruvīṭi Rāmarāzu Raṅgappaṭāzu." It is dated, according to Mr. Sewell in Śaka 1545 which also falls into the reign of Rāma IV. There is thus room for the possible inference that while Rāma IV was ruling, princes Veṅkaṭa II and his cousin brother's son Raṅga VI were also associated with him in governing the country, but were in independent charge of some outlying provinces. Mr. Sewell notes also a record from Arumbāvūr (Trichinopoly district) which is dated in Śaka 1545 in the reign of Veṅkaṭappadēva. This latter must refer to prince Veṅkaṭa II.

the Rāmarāja line and Raṅga VI, the adopted son of Gōpāla, in the Venkaṭādri line.

From lithic records we learn that the chiefs of Rāveḷa who once also served under Kṛishṇarāya, were subordinate to Rāma IV, otherwise known as Rāmadēva of Penugonḍa, though there is good reason to believe that he must have been ruling at Chandragiri. The paucity of his records beyond the Mysore State¹ clearly points to the decline of suzerain power in his time and to the independence assumed by most of the feudatory chiefs.

According to the Kūniyūr plates and the *Rāmarājīyam* the next successor on the Karṇāṭa throne was Venkaṭapati (II) the grandson of Aḷiya-Rāmarāja. The latter is stated to have married four wives, of whom Tirumalāmbā the daughter of Kṛishṇarāya and sister of Sadāśiva, was one. The three others were daughters of noblemen who were related to the royal family. Rāma's two sons by Tirumalāmbā were Kṛishṇapa and Pedda-Timma. Koṇḍarāja, Rāchūri Timma and Śrīraṅga were his sons by other wives. Of these latter Koṇḍarāja is stated to have ruled at Ānegondipura and Śrīraṅga apparently continued the line having given birth to two sons Peda-Venkaṭapati (II) and China-Venkaṭapati. The former was crowned to the throne by Tirumala Tātāchārya and married Baṅgāramāmbā, who, according to the *Rāmarājīyam* was the daughter of Gobbūri Ōbarāja.²

It was stated above that Peda-Venkaṭa was the chosen crown prince already during the reign of his predecessor Rama IV. The same will have to be asserted of Venkaṭa's successor Raṅga VI; for, we find a copper-plate record of the latter from Māgaḍi in the Bangalore district, dated in Śaka 1552, the very year in which probably Venkaṭa ascended the throne. Venkaṭa appears to have for a time revived the supreme sovereignty of the Karṇāṭa kings, which was found to be fast declining. The famous Tirumala-Nāyaka of Madura made the grant recorded in the Kūniyūr plates with permission from king Venkaṭapati-Mahārāja. Another copper plate grant from the Nanjangud tāluka shows that the Mysore chiefs were also his subordinates.³ The Sāḷuva chiefs of Kārvēṭinagar owed allegiance to Venkaṭa. An interesting document of his time now preserved in the Dargā of Bābayya at Penugonḍa records the renewal of certain old grants together with the bestowal of fresh grants, to that popular Muhammadan institution. The reason for the renewal is stated to be "the loss of the original documents on the occasion when Immaḍi Hāvaḷi Bhairēgaḍa of Pedda-Ballāpura seized the fortress of Penugonḍa then in the possession of Haḍapa Komārarāja. Mr. Rice mentions in connection with Doḍ (Pedda-Ballāpura, a chief of Āvati (Hāvaḷi?) named Malla-Bairēgaḍa who founded that

¹ In the Madras Presidency we have an epigraph of his time at Daḍikkombu (Madura District).

² It is not impossible that the Vaishṇava teacher Tirumala Tātāchārya, who performed the coronation of Venkaṭa I, should have lived to the time of Venkaṭa II. It may also be that the event is here described without any significance—the verse about the coronation by Tirumala Tātāchārya being borrowed *verbatim* from the copper-plate records of Venkaṭa I. Gobbūri Ōbarāja, the father-in-law of Venkaṭa II must be different from the father-in-law of Venkaṭa I, who bore also the same name.

³ The quick succession of kings from Narasimha downwards, recorded at the beginning of this grant, gives us a clue to the apparent claims the Karṇāṭa kings advanced for usurping the Vijayanagara throne. After Narasimha (*i.e.*, Vīra-Narasimha) came Kṛishṇa. He was followed by Rāma, who received the kingdom direct from Kṛishṇa as his son-in-law. Rāma's younger brother Timma was crowned at Penugonḍa. After him ruled his son Raṅga II and then came the latter's brother Venkaṭa I. Venkaṭa's grandson (correctly his nephew's son) Rāma IV came next and then his elder brother Venkaṭa II.

town and his three successors all of whom were named Hāvaḷi Bairēgauda. They were perhaps subordinates at the commencement of their career, to the Vijayanagara kings at Penugonḍa, but evidently during the reign of Veṅkaṭa II or a little before appear to have become rebellious and to have seized the capital of the Vijayanagara kings for at least a short period." An epigraph from Nārāyaṇavanam dated in Śaka 1544, while Veṅkaṭa was yet the crown prince, refers to the mercantile community of Ayyāvoḷe headed by Prithiviśeṭṭi Rāyanimantri-Bhāskara and to the gift of voluntary fees to the Vaishṇava temple of that village. Prithiviśeṭṭi Rāyanimantri-Bhāskara is apparently identical with Rāyanimantri-Bhāskara whose date is discussed by Mr. Gurijāda Rāmamurtigāru in a pamphlet entitled *Rāyanabhāskaramantri-charitramu*. In the course of his discussion the learned author refers to a *pharmāna* of Ālamghir Pādshā which mentions Prithiviśeṭṭi, *father* of Mantribhāskara.¹ This Bhāskara, generally believed to have been a contemporary of Kṛṣṇarāya, was a most charitable man and is supposed to have induced the kings of his time, by paying large amounts into their treasury, to discontinue certain items of taxation which were distressing the poorer classes. He may have been a Brahman who cast his lot with the welfare of the mercantile community, and this is perhaps the reason why the Kōmaṭi merchants of this day still call their Brahman spiritual *guru* by the general epithet Bhāskara-Pantulu. The Telugu poem *Rāmarājīyam* in speaking of Veṅkaṭa II says that he ruled the whole country between Sētu (*i.e.*, Rāmēśvaram) and Kṛṣṇā. The poet and chief Dāmera (Dāmarla) Veṅkaṭapati was ruling over the whole coast line from Pulicat to St. Thome as a subordinate of Veṅkaṭa. "The Founding of Fort St. George" compiled by Mr. Foster, says that the chief Veṅkaṭapati was 'the lord-general of Karnāṭika and grand vizier to the king.' He had, besides, under him 15,000 soldiers to put into the field. It was this Dāmarla Veṅkaṭapati that first granted with the permission of Veṅkaṭa II, a *cowl* to the English factors to build a fort at Madraspatam which the Nāyak had called Chennapatnam after the name of his father.² We learn also from the interesting extracts published in the book quoted above, that king Veṅkaṭapati died at Nārāyaṇavanam in A.D. 1642. This is in perfect accordance with what we find from the available dates of Raṅga VI as a ruling king, the earliest of which is Śaka 1563, Vishu (Vṛisha), Āsvayuja 30 (September-October).

Veṅkaṭapati is stated to have left only an illegitimate son who could not on that account succeed to the throne. Consequently his nephew Raṅga VI, who was adopted by Gōpāla of the Veṅkaṭādri line under the bidding of god Veṅkaṭēśa in a dream, was proclaimed king on October 29, A.D. 1642.³ He was, as already suggested, serving as crown prince since the beginning of Veṅkaṭa's rule, *i.e.*, from Śaka 1552 (=A. D.

¹ *Annual Report* on Epigraphy for 1913, Part II, paragraph 73.

² Three inscribed stones on the tank bund at Narasamaṅgalam (North Arcot district) (Nos. 261-264 of the Madras Epigraphical collection for 1906) make reference to that tank as being designated Chennasāgaram after Chennappa-Nāyaka, the father of Veṅkaṭappa-Nāyaka, who built the tank. Their dates correspond to the time of Dāmarla Veṅkaṭapati. The records may probably, therefore, have to be referred to the same chief; see also *Annual Report* on Epigraphy for 1907, p. 90, para. 74. An inscription from Tiruvandavār in the Chingleput district refers to Veṅkaṭappa-Nāyaka, grandson of Dāmal Veṅkaṭappa-Nāyaka and son of Channappa-[Nāyaka]. It is dated in Śaka 1547, during the reign of Rāma IV. Dāmarla or Dāmerla, therefore, as applied to this chief, indicates the village Dāmal in the same district which appears to have been his native village.

³ *The Founding of Fort St. George*, p. 25, footnote.

1630). The latest record in which he is called Raṅga, son of Gōpāla and grandson of Āravīṭi Raṅgaparājayya (*i.e.*, Raṅga IV), is dated in Śaka 1586 (correctly Śaka 1585), Śubhakṛit.¹ A few records of his time found in the Bēlūr tāluka of the Hassan district, state that Raṅga was ruling at Vēlāpurī (sometimes also spelt Bēlāpurī). In Śaka 1587 he was ruling the Penugonḍa country from his throne at Chandragiri-durga, which was now his permanent capital.

Inscriptions do not supply us with any historical details about the reign of Raṅga. The *Rāmarājīyam* says that Raṅga was 'raised to the throne' by Gōpāla (*i.e.*, was adopted by him to succeed to the Kārṇāṭa throne as described in copper plate records) and ruled from his capital Vēlūru. The latter was the seat of Government also under Veṅkaṭa I. It is doubtful whether Raṅga's capital Vēlūru is to be identified with Vellore or with Vēlāpurī (Bēlūr) in the Hassan district, mentioned above. Raṅga is represented to have defeated the army of Kutupuśāhu, who must be identical with Abdulla Qutb Shah, the fifth of the Qutb Shahi kings of Golconda, who ruled from A.D. 1611 to 1672. According to Mr. Foster's extracts, the Muhammadan kings of Golconda and Bijapur began to invade the territories of the Hindu king in 1642, immediately after the death of king Veṅkaṭapati (II). They are even stated to have occupied the whole country on the coast. In 1644 the Moors advanced into the interior, but were defeated. Perhaps the defeat of the army of Kutupuśāhu mentioned in the *Rāmarājīyam* is the defeat registered in Foster's extracts. Raṅga was a lover of poets and largely patronised them.² He is remembered in history as the last great Hindu sovereign, who in the cyclic year Pārthiva (=A.D. 1645-46), in the dark half of the month Kārttika, gave his royal sanction to the *cowl* already granted to the English factors by Dāmarla Veṅkaṭappa in the reign of Veṅkaṭa II, and affixed his signature not by adding his name as might be expected, but by adding that of Śrīrāma, probably his tutelar deity. This act of Raṅga VI was done with the best of motives, *viz.*, in order to secure the prosperity of his subjects by opening up the country for foreign merchandise. It is unnecessary to add that this pious object of Raṅga has been more than fulfilled and, in the fullness of time has borne such fruit as never India could have dreamed of if the relentless Muhammadans or the unscrupulous petty chieftains had gained the upper hand. The Dutch also at this time are reported to have made vigorous attempts to extend their sway. King Śrī-Raṅga declared war and sent his general Chinnana-Chetty against them. The Hindus besieged Pulicat; but internal dissensions and differences among the three powerful Nāyaka subordinates of the empire, seem to have ultimately weakened the Hindus. The Muhammadan powers of Golconda and Bijapur found it a favourable opportunity to assert themselves. The whole country was conquered and the able general Mir Zumla finally became its Nāwab. King Raṅga fled southwards and found refuge with one of his subordinates, a chief of Keḷadi. He must

¹ In another inscription of Śaka 1582 Raṅga VI is called the great grandson of Āravīṭi Rāmarājayya-Veṅkaṭādrivājayya (*i.e.*, Veṅkaṭādrī, brother of Āliya Rāmarāja).

² *Rāmarājīyam*, Oppert's edition, v. 358. In Śaka 1567 the date of a record at Koḍigepalli near Hindupur, it is stated that Raṅga made the grant with permission from Pedda-Veṅkaṭapatirāya. This suggests that Veṅkaṭa II was still living having perhaps abdicated the throne in favour of Raṅga VI, or rather, that some member of the royal family answering to that name held the strings of administration in his hands. The Kāsaram plates of Śaka 1566, Tārāṇa (*Annual Report on Epigraphy for 1911*, p. 88, paragraph 60) register a grant made by Raṅga VI at the request of a certain Veṅkaṭa, son of Kari-Channa and grandson of Pedda-Veṅkaṭa.

have there kept up the semblance of a rule for at least two more decades. The English factors of Madras in their reports to Surat, have referred to a severe famine which occurred in A.D. 1647 and in which thousands of lives perished. With Raṅga's permission were issued by the East India Company the coins usually known as the 'three Swami-pagodas.' These are described as such by Sir Walter Elliott and Thurston.

With this we might close the history of the Kaṛṇāṭas. Later inscriptions, however, of kings called alternately Raṅgarāya or Venkaṭapati, and bearing all the imperial Vijayanagara titles are found extending beyond Śaka 1587, which is the latest sure date for Raṅga VI. They go up to Śaka 1640 and nay! even to Śaka 1715 (=A.D. 1793). The Sugutūru and Yelahaṅka chiefs of the Bangalore district, for instance, call themselves subordinates of a certain Śrīraṅgarāyadēva-Mahārāya, who was ruling at Ghanagiri (Penugonda) in Śaka 1639, Nandana. A grant by the Nāyaka queen Mangammāl was made in Śaka 1623 while the *Mahārājādhirāja*, *Paramēśvara* Vīra-Venkaṭadēva-Mahārāya, was governing on the jewelled throne at Ghanagiri-nagara. It is not possible to state at this stage of our epigraphical knowledge, how these later kings Venkaṭapati and Raṅga were related to the last two Kaṛṇāṭa rulers of that name and over what extent of territory they exercised their sway.¹

The subordinate families who wielded much power during the reign of the Kaṛṇāṭas, but nominally submitted to their overlordship were :—(1) the Nāyakas of Madura whose kingdom extended over almost the whole of the southernmost districts and lasted from A.D. 1559 to 1736 ; (2) the Nāyakas of Tanjore, who, for a time, asserted their sway over what may be called the Chōla dominions proper ; (3) the Nāyakas of Vēlūr, who were powerful in the modern North Arcot district ; (4) the Vodeyars of Mysore and their feudatories (the chiefs of Āvati, Yelahaṅka, Sugutūru, etc.) wielding their authority over a vast extent of territory ; and (5) the Nāyakas of Bednūr known also as Keḷadi or Ikkēri kings, whose sway extended as far as Malabar, down to the coast of Honore (Honāvar) and who, successfully opposing the advance of the Bijapur forces and the Portuguese of Goa, maintained their power for nearly a century and a half from A.D. 1499 down to A.D. 1763.

Detailed accounts of these various subordinate families cannot find a proper place in this paper. They are noted briefly in order to establish the connection which they bore to the Vijayanagara sovereigns.

The Nāyakas of Madura started almost an independent dominion in the south under Viśvanātha-Nāyaka, who was a military officer of Achyuta and followed that sovereign in his campaign against Travancore. On this occasion he 'conquered many kings including the Pāṇḍyas on the battlefield in the Tiruvadi (Travancore) country and acquired by force the sovereignty over Madhurā-rājya.' A record of Śaka 1485 actually states that in the time of Sadāśiva, Viśvanātha-Nāyaka got as an *amaranāyaka*-grant from the great Rāmarājar-Ayyaṇ (Hemrāj), the Tiruvadi-dēśa.

¹ Mr. Sewell gives a long list of the Kaṛṇāṭa kings who followed Chinna-Venkaṭa III (*Forgotten Empire*, p. 216). The *Rāmarājīyam* also mentions three to four generations of kings subsequent to Chinna-Venkaṭa. His grandson Rāma or Kōḍaṇḍarāma who was the patron of the poem *Rāmarājīyam* is stated to have built (renovated ?) the big *gōpura* of Virūpāksha (at Hampi), to have rendered into the *dvipada* metre the story of the *Rāmāyana* and dedicated the same to Virūpāksha and to have constructed for Raṅga a temple on the banks of the Tuṅgabhadra river.

Viśvanātha's son, Kṛṣṇappa-Nāyaka, was also subordinate to Sadāśiva and issued the Kṛṣṇāpuram plates with the permission of Tirumala, who was then at the head of the State. His son Virappa was the feudatory of Raṅga II while he was himself the overlord of the Pāṇḍya chief Vāṇādarāya. The next Nāyaka, Vīra-Kṛṣṇa or Kumāra-Kṛṣṇa was a contemporary of Venkaṭa I, and as his feudatory induced that king to issue the Veṅkaṅguḍi plates. Muddu-Kṛṣṇa and Muddu-Vira the two next Nāyakas, were likewise subordinates of Venkaṭa I. The great Tirumala-Nāyaka, in whose time the Nāyakas of Madura must have been at the height of their power, was a feudatory of Venkaṭa II. It was in this capacity that he claims to have invaded the Travancore country and exacted tribute from it. Later Nāyakas and their history down to queen Minākshī are noted by Mr. Sewell in his *Lists of Antiquities*, Vol. II. They must have shaken off the Vijayanagara supremacy some time during the reign of Tirumala-Nāyaka. The Madura-Nāyakas were devotees of the famous Minākshī temple at Madura and largely contributed towards its improvement. In the Tirumala-Nāyaka-maṇḍapa (also called Pudu-maṇḍapa) at Madura are found on pillars, the statues of the Madura chiefs of whom Tirumala-Nāyaka and his two consorts occupy a prominent place. Copper coins issued by Muddu-Kṛṣṇa and the founder Viśvanātha have been published by Professor Hultzsch. In the latter part of their career the Nāyakas of Madura were constantly at war either with their neighbours, the Nāyakas of Tanjore, the Voḍeyars of Mysore or the Muhammadans of Golconda. Sāmbāmātya, a general of Vijayaranga-Chokkanātha is stated to have contracted friendship with Sādulā-Khān (*i.e.*, Sādatullāh Khān) of Arcot, defeated Ānandarao Pēshwā of Tanjore and entered into an alliance with Nañjarāja of Mysore. Of the Madura Nāyakas, Tirumala, Muddaḷagādri and Vijayaranga-Chokkanātha were patrons of Telugu literature.

The Nāyaka line of Tanjore was founded by Chevva or Chinna-Chevva, who married a sister of the queen of the Vijayanagara king Achyutarāya. Mr. T. S. Kuppasvami Sastri of Tanjore, in a Tamil pamphlet entitled "A Short History of the Tanjore Nāyak princes," has given copious extracts from Sanskrit literature to show that during their régime learning was liberally encouraged and had, in consequence, developed highly under royal patronage. It is also stated that Chinna-Chevva completed the eleven storeyed *gōpura* of the Tiruvaṇṇāmalai temple which Kṛṣṇarāya had commenced and left unfinished. Achyutappa-Nāyaka, the son of Chevva, must have been a feudatory of both Raṅga II and Venkaṭa I. Achyutappa's chief minister was the Brahman Dīkshitar Ayyan (*i.e.*, Gōvinda-Dīkshitar) who according to the *Sāhityaratnākara* also held the same office under Raghunātha-Nāyaka, the son of Achyutappa. This latter was the patron of the beautiful Telugu poem *Vijayavilāsam* written by Chemakūri Venkaṭādri. Reference has been already made as to how Raghunātha took up the cause of the Kārṇāṭa king Rāma IV and defeated the combined armies of Jaggarāya and the Madura Nāyaka on the banks of the Cauvery. His son Vijayarāghava-Nāyaka lost his life in a battle with Chokkalīṅga-Nāyaka of Madura. It was from this Vijayarāghava that the Dutch received the grant of Negapatam just as the English factors got Chennapaṭṇam from Raṅga VI.

No detailed account of the Nāyakas of Vellore has yet been made available. Like the Nāyakas of Tanjore these also were great patrons of learning, and the name

of the Śaiva-Advaita philosopher Appaya-Dikshita is intimately connected with Chinna-Bommu-Nāyaka. The Vēlūr family is generally supposed to have been founded by a certain Bomma-Nāyaka. But it is doubtful if we could identify him with Vēlūr Bommu-Nāyaka, who during the reign of Achyutarāya was governing the country around Jambai in the South Arcot District. The Viḷāpāka grant of Venkata I, supplies three names in succession, *viz.*, Vīrappa-Nāyaka or China-Vīra, his son Chinna-Bommu-Nāyaka and his son Liṅgama-Nāyaka. The second was, as already stated, the patron of Appaya-Dikshita and the feudatory of the Vijayanagara king Sadāśivarāya and of the Karnāṭa king Tirumala. A certain China-Vīra, son of Pāppu-Nāyaka of Vēlūr, is mentioned to have been the Governor of the Paḍaivīḍu-rājya during the rule of the Karnāṭa king Raṅga II. Liṅga of the Viḷāpāka plates was a subordinate of Venkaṭa I. The titles held by the family clearly point to its members being followers and upholders of the pure Śaiva religion as expounded perhaps by the scholar Appaya-Dikshita. Vellore having eventually become the capital of the Karnāṭa kings, the power wielded there by the local Nāyakas must have been considerably weakened, if not altogether become extinct.

Enough and more has been written about the Mysore Voḍeyars. Recent accounts of them given by Mr. Rice and Mr. S. Krishnaswami Aiyangar leave nothing to be added. Rāja-Voḍeyar was the first in the family who asserted himself and tried to shake off the Vijayanagara yoke. He was a subordinate of Venkaṭa I; but so long as that powerful monarch held the reins of Government, it was not apparently possible for Rāja-Voḍeyar to do anything. The death of Venkaṭa in A.D. 1614 and the subsequent disputes that arose about succession, gave a general opportunity for petty chiefs to strengthen their position and Rāja-Voḍeyar was not slow. He displaced the Vijayanagara viceroy at Seringapatam, who was then prince Tirumala II, nephew of Venkaṭa. In spite of the independent power thus secured by Rāja-Voḍeyar, the Mysore chiefs continued to accept the sovereignty of the Vijayanagara rulers and made grants mostly with their permission. Some famous kings of the line were Kaṇṭhīrava-Narasarāja, who issued the gold pieces known as Kantheroy-fanams and who acquired by conquest "Daṇāyakankōṭṭai, Satyamaṅgala and other places from the Nāyak of Madura" and Chikka-Dēvarāya 'who established a kingdom which extended from Palni and Ānaimalai in the south to Midagēsi in the north.' Frequent invasions into the Madura country and counter-invasions by the chiefs of the latter into Mysore were not uncommon. Maṅgammāl is stated to have once joined hands with Taṅjāvūr to oppose Mysore.

Of the Keḷadi kings who ruled over the Āraga country including Gutti (Chandragutti), Bārakūr and Mangalore, Sadāśiva-Nāyaka was the first. He was a military officer of the Vijayanagara king Sadāśivarāya. Sadāśiva's grandson Rāmarāja-Nāyaka was similarly a feudatory of the Karnāṭa kings Tirumalarāya and his son Ranga II. He was devoted to the Kṛṣṇadēva temple at Udipi and made grants to it through the Mādhva teacher Vādirājatīrtha. Rāmarāja's brother Venkaṭappa-Nāyaka was the most famous of the line. He and Śivappa-Nāyaka, a great grandson of Sadāśiva-Nāyaka are stated to have revived the Advaita-maṭha at Śrīngēri and to have patronised also the Dvaita institutions at Udipi. Thus the earlier Bednūr chiefs with a true political sagacity afforded liberal patronage to

Dvaita and Advaita schools alike, though later members of the family are known to have been bigoted Śaivas of the Līṅgāyat creed. Virabhadra-Nāyaka is stated to have rendered active help to Veṅkaṭa II on the battlefield. The last of the Karṇāṭa kings, Raṅga VI, sought refuge with the Bednūr chief Śivappa-Nāyaka when he was ousted from Chandragiri by the Muhammadan kings of Golconda and Bijapur. In the Bednūr family was also a female ruler by name Chinnammāji during whose reign, about A.D. 1680-81, there appears to have been oppression from the invading Mughals. The Italian traveller Pietro Della Valle was at Ikkēri (the Capital of the Bednūr chiefs for a time) in the year 1623 and describes the ruler Veṅkaṭapa Naicka as a 'good soldier who much enlarged his territory.' The coins known as the *Ikkēri-varāhans* owe their origin to these chiefs of Keladi.

H. KRISHNA SASTRI.

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¹ The continued series of reports by A. Cunningham (Director-General of the Archæological Survey of India) which extend over the years 1862-1887 inclusive, are marked (C. S.) in this list.

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Madura	Ditto	Ditto.
Tanjore	Ditto	Ditto.
Kombakonam	Ditto	Ditto.
Chillambaram	Ditto	Ditto.
Conjeveram	Ditto	Ditto.
Bijanagar	Ditto	Ditto.
(b) Bombay Presidency—		
Ahmedabad	Ditto	Ditto.
Poona	Ditto	Ditto.
Karli	Ditto	Ditto.
Ambarnath	Ditto	Ditto.
Elephanta	Ditto	Ditto.
(c) Bijapur	Ditto	Ditto.
(d) Rajputana —		
Mount Abu	Ditto	Ditto.
Ajmir	Ditto	Ditto.
Jaipur	Ditto	Ditto.
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(f) Punjab—		
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Ditto for the year 1910-11, Part II.	Ditto . . .	Ditto, 1914. Rs. 13 or 19s. 6d.
Ditto for the year 1911-12, Part I.	J. H. Marshall, C.I.E., Lit. D., F.S.A., Director-General of Archæology in India.	Ditto, 1914. Rs. 1-8-0 or 2s. 3d.
MADRAS—		
Notes on the Amaravati Stūpa .	J. Burgess, Government Archæological Surveyor for Western and Southern India.	Government Press, Madras, 1882. Rs. 7-8-0
Notes and Inscriptions from Temples in the Madura District, Vol. IV.	J. Burgess, Government Archæological Surveyor for Western and Southern India.	Government Press, Madras, 1885-86.
Tamil and Sanskrit Inscriptions with some notes on village antiquities collected chiefly in the south of the Madras Presidency.	Ditto . . .	Ditto, 1886.
List of ancient monuments for conservation in the Madras Presidency in 1884.	Ditto . . .	Ditto, 1886-87.
Ditto in 1891.	A. Rea, Archæological Surveyor, Madras.	Ditto, 1891. Re. 0-6-0
Epigraphia Indica and Record of the Archæological Survey of India, Vol. III, 1894-95.	E. Hultzsch, Government Epigraphist.	Superintendent, Government Printing, Calcutta, 1895.
Ditto Vol. IV, 1896-97	Ditto . . .	Ditto, 1897.
Ditto „ V, 1898-99	Ditto . . .	Ditto, 1899.
Ditto „ VI, 1900-01	Ditto . . .	Ditto, 1901.
Ditto „ VII, 1902-03	Ditto . . .	Ditto, 1904.
Ditto „ VIII, 1905-06	Ditto . . .	Ditto, 1907.
Ditto „ IX, 1907-08	Drs. E. Hultzsch, Professor in the University of Halle and Sten Konow, Government Epigraphist for India.	Ditto.
Ditto „ X, 1909-10	Dr. Sten Konow, Government Epigraphist for India.	Ditto.

Title of work.	Name and official designation of author.	Press, date of publication and issue price of each volume or of complete work.
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List of tombs and monuments of Europeans, etc., in the Madras District.	Government of Madras.	Government Press, Madras, 1898, Re. 0-12-0.
List of tombs and monuments erected in Madras.	Ditto . . .	Ditto. Re. 0-6-0.
List of statues, monuments and busts erected in Madras in honour of distinguished servants of the State.	Government of Madras .	Government Press, Madras, 1898. Re. 0-1-6.
Annual Report of the Archæological Survey, Madras and Coorg, for the year 1899-1900.	A. Rea, Superintendent, Archæological Survey.	Ditto, 1900.
Ditto, 1900-01 .	Ditto . . .	Ditto 1901. Re. 0-1-6.
Ditto, 1901-02 .	Ditto . . .	Ditto, 1902.
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Ditto, 1903-04 .	Ditto . . .	Ditto, 1904. Rs. 3-12-0.
Ditto, 1904-05 .	Ditto . . .	Ditto, 1905. Re. 1-0-0.
Annual Progress Report of the Archæological Survey Department, Southern Circle, for the year 1905-06.	Ditto . . .	Ditto, 1906. Re. 0-8-0.
Ditto, for the year 1906-07.	Ditto . . .	Ditto, 1907. Re. 0-8-0.
Ditto, for the year 1907-08.	Ditto . . .	Ditto, 1908.
Ditto, for the year 1908-09.	Ditto . . .	Ditto, 1909.
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Ditto, for the year 1911-12.	Ditto . . .	Ditto, 1912.
Report on Epigraphical work accomplished from July 1891 to June 1892.	E. Hultzsch, Government Epigraphist.	Ditto, 1892.
Ditto July 1892 to June 1893.	Ditto . . .	Ditto, 1893.

Title of work.	Name and official designation of author.	Press, date of publication and issue price of each volume or of complete work.
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Ditto do. 1894 to do. 1895.	Ditto . .	Ditto, 1895.
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Ditto do. 1896 to do. 1897.	Ditto . .	Ditto, 1897.
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Ditto do. 1900 to do. 1901.	E. Hultzsch, Government Epigraphist.	Ditto, 1901.
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Ditto do. 1902 to do. 1903.	Ditto . .	Ditto, 1903.
Ditto do. 1903 to do. 1904.	V. Venkayya, Officiating Government Epigraphist.	Ditto, 1904.
Ditto do. 1904 to do. 1905.	Ditto . .	Ditto, 1905.
Annual Report of the Assistant Archæological Superintendent for Epigraphy, Southern Circle, for the year 1905-06.	V. Venkayya, Assistant Archæological Superintendent for Epigraphy.	Ditto, 1906.
Ditto, for the year 1906-07.	Ditto . .	Ditto, 1907.
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Ditto, for the year 1909-10.	H. Krishna Sastri, Assistant Archæological Superintendent for Epigraphy.	Ditto, 1910.
Ditto, for the year 1910-11.	Ditto . .	Ditto, 1911. Re. 0-12-0.
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The antiquities of the Kolaba Agency. (Ser. 330, Sel. Rec., Bombay, N. S. No. 7)	1854.
The antiquities of Kolhapoor illustrated. (Ser. 350, Sel. Rec., Bombay, N. S. No. 8.)	.. .	1854.
Extracts in connection with Mahomedan Architecture at Beejapoor, in the Satara Districts, etc., (1854). (Ser. 350, Sel. Rec., Bombay, N. S. No. 40.)	..	1857.
Observations on inscriptions on copper-plates dug up at Naroor, in the Koodal Division of the Sawunt Waree State, 1848; with translations and facsimiles, 1851. (Ser. 350, Sel. Rec., Bombay, N. S. No. 10.)	Major G. LeG. Jacob . .	1855.
Rock-cut Temples of Western India.	J. Fergusson, F.R.S., M.R.A.S.	Cundall & Downes, London, 1864.
Report on the illustration of the Archaic Architecture of India, etc.	Dr. Forbes Watson and Mr. Fergusson, General Cunningham, and Colonel Meadows Taylor.	1869.
Notes to accompany a series of photographs designed to illustrate the Ancient Architecture of Western India.	Captain Lyon, late of Her Majesty's 68th Regiment of Light Infantry.	Carey Brothers, Old College Street, 3, Geneva, 1871.
Memorandum on the Buddhist Caves at Junnar.	James Burgess, Archæological Surveyor and Reporter to Government, and J. F. Fleet, Bo. C. S.	Government Central Press, Bombay, 1874.
Memorandum on the antiquities at Dabhoi, Ahmedabad, Than, Junagadh, Girnar, and Dhank.	James Burgess, Archæological Surveyor and Reporter to Government.	Ditto, 1875.
Memorandum on the remains at Gumli, Gop, and in Kachh, etc.	Ditto . . .	Ditto.
Provisional lists of Architectural and other Archæological remains in Western India, including the Bombay Presidency, Sindh, Berar, Central Provinces, and Hyderabad.	Ditto . . .	Ditto.

Title of work.	Name and official designation of author.	Press, date of publication and issue price of each volume or of complete work.
<i>BOMBAY—contd.</i>		
Translations of inscriptions from Belgaum and Kaládgi Districts in the Report of the first season's operations of the Archæological Survey of Western India and of inscriptions from Kathiawar and Kachh.	J. F. Fleet, Bo. C.S., and Hari Vaman Limaya, B.A.	Government Central Press, Bombay, 1876.
Buddhist Caves of Ajanta. Second edition.	Prepared by Major R. Gill and revised by James Burgess, F.R.G.S., M.R.A.S.	Ditto, 1876.
Notes on the antiquities of the Talukas of Parner, Sangamner, Ankole, and Kopergaum forming the charge of the 2nd Assistant Collector, Ahmadnagar, with revised lists of remains in the Ahmadnagar, Nasik, Puna, Thana, and Kaldági Zillahs.	W. F. Sinclair, Bo. C.S., and J. Burgess, Archæological Surveyor and Reporter to Government.	Ditto, 1877.
Architectural and Archæological remains in Khandesh in 1877.	W. H. Probert, Collector of Khandesh.	Ditto.
Reports (from the Collectors) regarding the Archæological remains in the Karachi, Haiderabad, and Shikarpur Collectorates in Sindh, with plans of tombs.		Ditto, 1876.
Report on the Architectural and Archæological remains in the Province of Kachh, with 5 papers by the late Sir Alex. Burnes. (Selections from the records of the Bombay Government, No. CLII, new series.)	Dalpatram Pranjivan Khar.	Ditto. Re. 1-14-0.
Notes on the Buddha Rock-Temples of Ajanta, their paintings and sculptures, and on the paintings of the Bagh Caves, modern Buddha Mythology, etc.	J. Burgess, Archæological Surveyor, Western India.	Ditto.
Inscriptions from the Cave Temples of Western India with descriptive notes, etc.	J. Burgess, Archæological Surveyor and Bhagwanlal Indrají Pandit.	Ditto, 1881.
Lists of the antiquarian remains in the Bombay Presidency. Sindh and Berâr, with an Appendix of inscriptions from Gujrat.	J. Burgess, Archæological Surveyor and Reporter to Government.	Ditto, 1885.
Scheme for the protection and conservation of ancient buildings in and around the City of Ahmedabad.	A. W. Crawley Boevy, C.S.	Education Society's Press, Bombay, 1886.

Title of work.	Name and official designation of author.	Press, date of publication and issue price of each volume or of complete work.
<i>BOMBAY—contd.</i>		
List of photographs of ancient buildings and antiquities, Bombay.	...	Superintendent, Government Printing, Calcutta, 1887.
The antiquities of the town of Dabhoi in Gujrat.	James Burgess, LL.D., C.I.E., Director-General of the Archæological Survey of India, and H. Cousens, M.R.A.S., Archæological Surveyor, Western India.	George Waterston & Sons, Edinburgh, 1888.
List of Photographic Negatives of ancient buildings and antiquities of the Bombay Presidency.	H. Cousens, M.R.A.S., Archæological Surveyor, Western India.	Government Central Press, Bombay, 1888.
List of Photographic Negatives of the paintings copied from the Ajanta Caves between 1872 and 1885 at the Government School of Art, Bombay, Supplement to the Bombay List of Photographic Negatives.	James Burgess	Superintendent, Government Printing, Calcutta, 1889.
Bijapur Guide	H. Cousens, M.R.A.S., Archæological Surveyor, Western India.	Orphanage Press, Poona, 1889.
Notes on the buildings and other antiquarian remains at Bijapur, with translations of the inscriptions.	H. Cousens, Archæological Surveyor, Western India, and E. Rehatsek.	Government Central Press, Bombay, 1890.
An account of the Caves at Nad-sur and Karsambla.	H. Cousens, Archæological Surveyor, Western India.	Ditto, 1891. Re. 0-10-0.
Progress Report of the Archæological Survey of Western India for the months of December 1889 to April 1890.	Ditto	Ditto, 1890.
Ditto for the months of May 1890 to April 1891.	Ditto	Ditto, 1891.
Ditto for the months of May 1891 to April 1892.	Ditto	Ditto, 1892.
Ditto for the months of May 1892 to April 1893.	Ditto	Ditto, 1893.
Ditto for the months of May 1893 to April 1894.	Ditto	Ditto, 1894.
Ditto for the months of May 1894 to August 1895.	Ditto	Ditto, 1895.

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BOMBAY—<i>contd.</i>		
Progress Report of the Archæological Survey of Western India for the months of September 1895 to April 1896.	H. Cousens, Archæological Surveyor, Western India.	Government Central Press, Bombay, 1896.
Ditto for the year ending 30th June 1897.	Ditto . . .	Ditto, 1897.
Ditto for the year ending 30th June 1898.	Ditto . . .	Ditto, 1898. Re. 0-6-0.
Ditto for the year ending 30th June 1899.	Ditto . . .	Ditto, 1899. Re. 0-8-0.
Ditto for the year ending 30th June 1900.	Ditto . . .	Ditto, 1900. Re. 0-8-0.
Ditto for the year ending 30th June 1901.	Ditto . . .	Ditto, 1901. Re. 0-8-0.
Ditto for the year ending 30th June 1902.	Ditto . . .	Ditto, 1902.
Ditto for the year ending 30th June 1903.	Ditto . . .	Ditto, 1903.
Ditto for the year ending 30th June 1904.	Ditto . . .	Ditto, 1904.
Ditto for the year ending 30th June 1905.	Ditto . . .	Ditto, 1905. Re. 0-10-0
Progress Report of the Archæological Survey of India, Western Circle, for the months of July 1905 to March 1906, inclusive.	Ditto . . .	Ditto, 1906. Re. 1-0-0.
Ditto for the year ending 31st March 1907.	Ditto . . .	Ditto, 1907. Re. 0-8-0.
Ditto for the year ending 31st March 1908.	Ditto . . .	Ditto, 1908. Re. 0-14-0.
Ditto for the year ending 31st March 1909.	Ditto . . .	Ditto, 1909. Re. 0-12-0.
Ditto for the year ending 31st March 1910.	Ditto . . .	Ditto, 1910. Re. 0-10-0.
Ditto for the year ending 31st March 1911.	A. H. Longhurst, Superintendent, Archæological Survey, Western Circle.	Ditto, 1911. Re. 0-8-0.
Ditto for the year ending 31st March 1912.	D. R. Bhandarkar, Superintendent, Archæological Survey, Western Circle.	Ditto, 1912.

Title of work.	Name and official designation of author.	Press, date of publication and issue price of each volume or of complete work.
BOMBAY—concl'd. Paintings in the Buddhist Cave-Temples of Ajanta, Khandesh, India. Volume I (Pictorial subjects).	John Griffiths late Principal of the Sir Jamshedji Jijibhai School of Art, Bombay, Fellow of the University of Bombay, Member of the Bombay Branch of the Royal Asiatic Society.	W. Griggs, London, 1896.
Ditto ditto, Volume II (Decorative details).	Ditto . . .	Ditto, 1900.
List of statues and busts in the Town and Island of Bombay.	Government of Bombay .	Government Central Press, 1911. Re. 0-3-0.
Revised list of Tombs and monuments of Historical or Archæological interest in Bombay and other parts of the Presidency.	Ditto . . .	Ditto 1912. Re. 1-6-0.
BENGAL— Account of a visit to Mount Parisnath (in Chutia Nagpoor) and the Jain Temples thereon in 1827. (Ser. 250, Sel. Rec., Bengal, No. 38.)	A. P. . . .	1861.
Ruins of the Nalanda Monasteries at Burgaon, Sub-Division Bihar, District Patna.	A. M. Broadley, B.C.S. .	Bengal Secretariat Press, Calcutta, 1872.
Report on the Archæology of the District of Midnapore.	H. L. Harrison, B.C.S. .	Ditto, 1873.
Buddha Gaya, the Hermitage of Sākya Muni.	Rajendralāla Mitra, LL.D., C.I.E.	Ditto, 1878.
List of objects of antiquarian interest in Bengal.	. . .	Ditto, 1879.
A List of the objects of antiquarian interest in the Lower Provinces of Bengal (with historical descriptions).	.....	Ditto, 1879. Not for sale.
Revised list of ancient monuments in Bengal, 1886.	Government of Bengal, P. W. Department, assisted by J. D. Beglar and W. B. B.	Ditto, 1887.
Some Historical and Ethnical aspects of the Burdwan District.	W. B. Oldham, C.I.E., Indian Civil Service.	Ditto, 1891. Not for sale.
Discovery of the exact site of Asoka's classic Capital of Pātaliputra, the <i>Palibothra</i> of the Greeks, and description of the superficial remains	L. A. Waddell, M. B. .	Ditto, 1892 Re. 1.

Title of work	Name and official designation of author.	Press, date of publication and issue price of each volume or of complete work.
BENGAL—contd.		
A Brief History of Bodh Gaya Math, District Gaya.	Rai Ram Anugrah Narayan Singh Bahadur.	Bengal Secretariat Press, Calcutta, 1893. As. 8.
Gazetteer of Sikkim	With an introduction by H. H. Risley, C.I.E., Indian Civil Service.	Ditto, 1894. Rs. 8.
Some Historical and Ethnical aspects of the Burdwan District with an explanatory Index (Re-print).	W. B. Oldham, C.I.E., Indian Civil Service.	Ditto, 1894.
List of Statues, Monuments, and Busts in Calcutta of historical interest.	.....	Ditto, 1902. Not for sale.
List of Inscriptions on tombs or monuments possessing historical or archæological interest.	C. R. Wilson, M.A., of the Bengal Educational Service.	Superintendent, Government Printing, Calcutta, 1896.
List of Ancient Monuments in Bengal—Revised and corrected up to 31st August 1895.	.. ..	Bengal Secretariat Press, Calcutta, 1896, Rs. 10.
List of ancient monuments:—		
Dacca Division . . . .	.. ..	Ditto. Re. 1.
Rajshahi Division . . . .	... ..	Ditto. „ 1.
Orissa Division . . . .	... ..	Ditto. Rs. 1-5-0.
Chota Nagpur Division . . . .	.....	Ditto. Re. 1.
Bhagalpur Division . . . .	.....	Ditto. Rs. 1-4-0.
Chittagong Division . . . .	... ..	Ditto. Re. 0-4-0.
Burdwan Division . . . .	.. ..	Ditto. „ 1.
Patna Division . . . .	.....	Ditto. Rs. 4.
Presidency Division . . . .	.....	Ditto. „ 2.
Report with photographs of the repairs executed to some of the principal temples at Bhūbānēs-vār and caves in the Khāndāgīrī and Udaigiri Hills, Orissa, between 1898 and 1903.	M. H. Arnott, M. Inst. C.E., Executive Engineer, Bengal Public Works.	Waterlow & Sons, Limited, London, W., 1903. Rs. 10-9-0.
Report on the excavations at Pataliputra.	Lt.-Col. L. A. Waddel	Superintendent, Government Printing, Calcutta, 1903, Rs. 3-5-0.

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Annual Report of the Archæological Survey, Bengal Circle for the year 1900-01.	T. Bloch, Archæological Surveyor, Bengal Circle.	Bengal Secretariat Press, Calcutta, 1901.
Ditto for the year ended April 1902.	Ditto . . .	Ditto, 1902.
Ditto for the year ended April 1903.	Ditto . . .	Ditto, 1903.
Ditto for the year ended April 1904.	Ditto . . .	Ditto, 1904.
Ditto for the year ended April 1905.	Ditto . . .	Ditto, 1905.
Annual Report of the Archæological Survey, Eastern Circle, for 1905-06.	Ditto . . .	Ditto, 1906. Not for sale.
Ditto for 1906-07. . . .	A. H. Longhurst, Officiating Superintendent, Archæological Survey, Eastern Circle.	Ditto, 1907. Not for sale.
Ditto for 1907-08. . . .	T. Bloch, Superintendent, Archæological Survey, Eastern Circle.	Ditto, 1908. Not for sale.
Ditto for 1908-09 . . .	Ditto . . .	Ditto, 1909. Not for sale.
Ditto for 1909-10 . . .	A. H. Longhurst, Officiating Superintendent, Archæological Survey, Eastern Circle.	Ditto, 1910. Not for sale.
Ditto for 1910-11 . . .	D. B. Spooner, Superintendent, Archæological Survey, Eastern Circle.	Ditto, 1911, Re. 0-12-0.
Ditto for 1911-12 . . .	Ditto . . .	Ditto, 1912.
UNITED PROVINCES—		
Description of the antiquities at Kalinjar.	F. Maisey . . .	Baptist Mission Press, 1848.
List of Photographic Negatives of the monumental antiquities in the North-Western Provinces and Oudh.	A. Führer, Ph. D., Archæological Surveyor, and E. W. Smith, Architectural Surveyor, North-Western Provinces and Oudh.	Superintendent, Government Printing, Calcutta, 1889.
Progress Report of the Epigraphical and Architectural Branches of the North-Western Provinces and Oudh from October 1889 till 30th June 1891.	Ditto . . .	Government Press, North-Western Provinces and Oudh, 1892.

Title of work.	Name and official designation of author.	Press, date of publication and issue price of each volume or of complete work.
UNITED PROVINCES—<i>contd.</i>		
Annual Progress Report of the Archæological Survey Circle, North-Western Provinces and Oudh, for the year 1891-92.	A. Führer, Ph.D., Archæological Surveyor.	Thomason College Press, Roorkee, 1892.
Ditto for the year ending June 1893.	Ditto . . .	Ditto, 1893.
Ditto for the year ending June 1894.	Ditto . . .	Ditto, 1894.
Ditto for the year ending June 1895.	Ditto . . .	Ditto, 1895.
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Ditto for the year ending June 1897.	Ditto . . .	Ditto, 1897.
Ditto for the year ending June 1898.	Ditto . . .	Ditto, 1898.
Ditto for the year ending June 1899	V. A. Smith, I.C.S. and E. W. Smith, Archæological Surveyor.	Government Press, North-Western Provinces and Oudh, 1899.
Ditto for the year ending 31st March 1900.	E. W. Smith, Archæological Surveyor	Ditto, 1900.
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Annual Progress Report of the Archæological Survey Circle, United Provinces, for the year ending 31st March 1902.	Government Press, United Provinces, 1902.
Ditto for the year ending 31st March 1903	E. B. S. Shepherd, Archæological Surveyor.	Ditto, 1903.
Annual Progress Report of the Archæological Surveyor, United Provinces and Punjab for the year ending 31st March 1904.	W. H. Nicholls, Archæological Surveyor.	Ditto, 1904.
Ditto for the year ending 31st March 1905.	Ditto . . .	Ditto, 1905.
Annual Progress Report of the Archæological Surveyor, Northern Circle, for the year ending 31st March 1906.	Ditto . . .	Ditto, 1906.
Ditto for the year ending 31st March 1907.	Ditto . . .	Ditto, 1907.

Title of work.	Name and official designation of author.	Press, date of publication and issue price of each volume or of complete work.
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Annual Progress Report of the Archæological Surveyor, Northern Circle, for the year ending 31st March 1908.	R. F. Tucker, Archæological Surveyor.	Government Press, United Provinces, 1908.
Ditto for the year ending 31st March 1909.	Ditto . . .	Ditto, 1909.
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Ditto for the year ending 31st March 1911.	G. Sanderson, Superintendent, in charge of Muhamedan and British Monuments, Northern Circle.	Ditto, 1911.
Ditto for the year ending 31st March 1912.	Ditto . . .	Ditto, 1912.
List of Christian tombs and monuments of archæological and historical interest and their inscriptions in the North-Western Provinces and Oudh.	A. Führer, Archæological Surveyor, North-Western Provinces and Oudh.	Government Press, North-Western Provinces and Oudh, 1896. Rs. 6.
The remains near Kasia in the Gorakhpur District.	V. A. Smith, I C.S. . . .	Ditto, Re. 1.
Portfolio of Indian Architectural drawings, Part I.	E. W. Smith, Archæological Surveyor, North-Western Provinces and Oudh.	Griggs & Sons, London. Rs. 9.
Report on the antiquities in the district of Lalitpur, North-Western Provinces.	Poorno Chander Mukherji . .	Thomason College Press, Roorkee, 1899.
Plates illustrating the Report on the antiquities in the district of Lalitpur, North-Western Provinces.	Ditto . . .	Ditto.
PUNJAB—		
Objects of antiquarian interest in the Punjab and its dependencies compiled from statements furnished by the several Deputy Commissioners, His Highness the Maharaja of Kashmir, and the Superintendents, Cis-Sutlej, Bahawalpur, and Chamba States.	.....	Public Works Department Press, Lahore, 1875.
Descriptive List of the Principal Buddhist Sculptures in the Lahore Museum.	A. Cunningham, Director-General, Archæological Survey.	.. . .

Title of work.	Name and official designation of author.	Press, date of publication and issue price of each volume or of complete work.
<i>PUNJAB—contd.</i>		
Descriptive List of Photographic Negatives of Buddhist Sculptures in the Lahore Central Museum.	J. L. Kipling, Curator .	1889.
Report of the Punjab Circle of the Archæological Survey, 1886-89.	C. J. Rodgers, Archæological Surveyor.	W. Ball & Co., Lahore, 1891.
List of inscriptions in the Lahore Museum.	Dr. M. A. Stein . . .	1899.
Revised list of objects of Archæological interest in the Punjab.	C. J. Rodgers, Archæological Surveyor.	Baptist Mission Press, Calcutta.
Report of the Archæological Survey, Punjab Circle, for the period from 1st January to 30th June 1901.	Ditto . . .	Ditto, 1901.
Annual Progress Report of the Archæological Surveyor, Punjab Circle, for the year ending 31st March 1902.	Dr. J. Ph. Vogel, Archæological Surveyor, Punjab.	Lahore, Caxton Printing Works, 1902.
Ditto for the year ending 31st March 1903.	Ditto . . .	Ditto, 1903.
Annual Progress Report of the Superintendent, Archæological Survey, Punjab, and United Provinces Circle, for the year ending 31st March 1904.	Ditto . . .	Ditto, 1904. Re. 1.
Ditto for the year ending 31st March 1905.	Ditto . . .	Economical Press, Lahore, 1905 Re. 1.
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Ditto for the year ending 31st March 1908.	Ditto . . .	Ditto, 1908. Re. 1.
Ditto for the year ending 31st March 1909.	A. H. Longhurst Esq., Offg. Superintendent, Archæological Survey.	Ditto, 1909.
Ditto for the year ending 31st March 1910.	Dr. J. Ph. Vogel, Superintendent Archæological Survey.	Ditto, 1910. Re. 1.

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<i>PUNJAB—concl'd.</i>		
Annual Progress Report of the Superintendent of the Archæological Survey, Northern Circle, for the year ending 31st March 1911.	Dr. J. Ph. Vogel, Superintendent, Hindu and Buddhist Monuments, Northern Circle.	Economical Press, Lahore, 1911. Re. 1
Ditto for the year ending 31st March 1912.	Ditto . . .	Ditto, 1912. Re. 1.
<i>N.-W. F. PROVINCE—</i>		
Report on the explorations of the Buddhist ruins at Jamalgarhi during the months of March and April 1873. (Supplement to the Punjab Government Gazette of 12th February 1874.)	Lieut. A. Crompton, R.E. .	1874.
Report on the explorations of the Buddhist ruins near Kharkai during the months of March and April 1874. (Supplement to the Punjab Government Gazette of 11th June 1874.)	Lieut. Skene Grant, R.E. .	1874.
Report on the exploration of the Buddhist ruins at Takht-i-Bai Yusafzai, during the months of January, February, March and April 1871. (Supplement to the Punjab Government Gazette of 6th August 1874.)	Sergeant F. H. Wilcher, R.E.	1874.
Report on the explorations at mound Shahji-ki-dheri near Peshawar. (Supplement to the Punjab Government Gazette of 18th November 1875.)	Lieut. C. A. Crompton, R.E.	1875
Report on the explorations at Taikal near Peshawar. (Supplement to the Punjab Government Gazette of 18th November 1875 and of 30th March 1876.)	Lieut. P. Haslett, R.E. .	1876.
Reports of Buddhist explorations in the Peshawar District by the 10th Company of Sappers and Miners.	Lieut. C. Maxwell, R.E. .	Public Works Department, Punjab, 1882.
Memorandum on excavations at Sikri, Yusafzai.	Capt. H. A. Deane, Assistant Commissioner.	Punjab Government Press, Lahore, 1889.
Detailed report of an Archæological tour with the Buner Field Force.	Dr. M. A. Stein, Principal, Oriental College, Lahore.	Ditto, 1898.

Title of work.	Name and official designation of author.	Press, date of publication and issue price of each volume or of complete work.
N. W. F. PROVINCE—<i>concl'd.</i>		
Report of Archæological Survey work in the North-West Frontier Province and Baluchistan for the period from January 2nd, 1904 to March 31st, 1905.	M. A. Stein, Ph.D., Inspector General of Education and Archæological Surveyor, North-West Frontier Province and Baluchistan.	Government Press, North-West Frontier Province, 1905. Rs. 2-4-0.
Annual report of the Archæological Survey of India, Frontier Circle, for 1906-07.	Dr. D. B. Spooner, Superintendent, Archæological Survey, Frontier Circle.	Ditto, 1907. Re. 0-4-0.
Ditto for 1907-08 . . .	Ditto . . .	Commercial Press, Peshawar, 1908. Re. 0-3-6.
Ditto for 1908-09 . . .	Ditto . . .	Government Press, North-West Frontier Province, 1909. Re. 0-6-0.
Ditto for 1909-10 . . .	Ditto . . .	Ditto, 1910. Re. 0-10-0.
Ditto for 1910-11 . . .	H. Hargreaves, Officiating Superintendent, Archæological Survey, Frontier Circle.	Ditto, 1911. Re. 0-9-0.
Ditto for 1911-12 . . .	Sir Aurel Stein, K.C.I.E., Ph.D., D.Sc., D. Lit., Superintendent, Archæological Survey, Frontier Circle.	Commercial Press, Peshawar, 1912. Re. 1-6-0.
BURMA—		
List of objects of antiquarian interest in British Burma.	Dr. E. Forchhammer, Government Archæologist, Burma.	Government Press, Burma, 1880. Re. 1.
Notes on the early History and Geography of British Burma—		
I. The Shwe Dagon Pagoda .	Ditto . . .	Ditto, 1883.
II. The first Buddhist Mission to Suvarnabhumi.	Ditto . . .	Ditto, 1884.
List of objects of antiquarian and Archæological interest in British Burma.	Ditto . . .	Ditto, Re. 1.
Reports on Archæological work done in Burma during the years 1879-89. (Being a Review, dated 18th June 1889.)	Dr. E. Forchhammer . . .	1889.
The Po U Daung inscription, erected by King Sinbyuyin in 1774 A. D.	Taw Sein Ko, Government Translator, Burma.	Government Press, Burma, 1881.

Title of work.	Name and official designation of author.	Press, date of publication and issue price of each volume or of complete work.
<i>BURMA—contd.</i>		
List of objects of antiquarian interest in Arakan.	Dr. E. Forchhammer, Government Archæologist, Burma.	Government Press, Burma, 1881.
List of objects of antiquarian interest in Burma.	Ditto . . .	Ditto, 1892. Re. 1
Inscription of Pagan, Pinya, and Ava (deciphered from the ink impressions found among the papers of the late Dr. Forchhammer)	Taw Sein Ko, Government Translator, Burma.	Ditto.
Report on the Antiquities of Arakan.	Dr. E. Forchhammer, Government Archæologist Burma.	Ditto.
Report on the Kyaukku Temple at Pagan.	Ditto . . .	Ditto.
The Kalyani Inscriptions . . .	Taw Sein Ko, Government Translator, Burma.	Ditto. Re. 1.
Memorandum of a tour in parts of the Amherst, Shwegyin, and Pegu Districts.	Ditto . . .	Ditto, 1897. Re. 0-4-0.
Note on a tour in Burma in March and April 1892.	F. O. Oertel, Assistant Engineer on special duty, Public Works Department, North-Western Provinces and Oudh.	Ditto, 1893.
Notes on an Archæological tour through Ramannadesa (The Talaing country of Burma)	Taw Sein Ko, Government Translator, Burma.	Reprinted from the <i>Indian Antiquary</i> by the Educational Society's Steam Press, Bombay, 1893.
A preliminary study of the Po U Daung Inscription of Sinbyuyin, 1774 A.D.	Ditto . . .	Ditto. Re. 0-4-0.
A preliminary study of the Kalyani Inscriptions.	Ditto . . .	Ditto. Rs. 2.
Notes on antiquities in Ramannadesa. (The Talaing country of Burma).	Lieutenant-Colonel R. C. Temple, late President, Rangoon Municipality, Burma.	Ditto, 1894.
Some remarks on the Kalyani Inscriptions.	Taw Sein Ko, Government Translator, Burma.	Ditto, 1894.
Inscriptions copied from the stones collected by King Bodawpaya and placed near the Arakan Pagoda, Mandalay.	Maung Tun Nyein, Officiating Government Translator, Burma.	Government Press, Burma, 1897, Rs. 16-0-0.

Title of work.	Name and official designation of author.	Press, date of publication and issue price of each volume or of complete work.
BURMA—concl'd.		
Inscriptions of Pagan, Pinya and Ava. Translation with notes.	Maung Tun Nyein, Officiating Government Translator, Burma.	Government Press, Burma, 1899. Rs. 1-8-0.
Inscriptions collected in Upper Burma.	Taw Sein Ko, Government Archæologist, Burma.	Ditto, 1900—1903. Rs. 12-4-0.
Index, Inscriptionum B. Birmanicarum, Vol. I.	Ditto . . .	Ditto, 1900. Re. 0-8-0.
List of objects of antiquarian and archæological interest in Upper Burma.	Ditto . . .	Ditto, 1900. Re. 0-8-0.
List of Pagodas at Pagan under the custody of Government.	Ditto . . .	Ditto. Re. 1.
Catalogue of exhibits in the Pagan and Mandalay Museums.	Taw Sein Ko, Seperintendent, Archæological Survey, Burma.	Ditto, 1906. Re. 0-6-0.
Catalogue of Coins in the Phayre Provincial Museum, Rangoon.	Ditto . . .	Ditto, 1909. Re. 0-4-0.
List of Ancient Monuments in Burma. I.—Mandalay Division.	Ditto . . .	Ditto, 1910. Re. 0-4-0
Report on Archæological work in Burma for the year 1901-02.	Ditto . . .	Ditto, 1902. Re. 0-2-0.
Ditto, for the year 1902-03 . . .	Ditto . . .	Ditto, 1903. Re. 0-3-0.
Ditto, for the year 1903-04 . . .	Ditto . . .	Ditto, 1904. Re. 0-8-0
Ditto, for the year 1904-05 . . .	Ditto . . .	Ditto, 1905. Re. 0-8-0.
Report of the Superintendent, Archæological Survey, Burma, for the year ending 31st March 1906.	Ditto . . .	Ditto, 1906. Re. 0-12-0.
Ditto, for the year ending 31st March 1907.	Ditto . . .	Ditto, 1907. Re. 0-8-0.
Ditto, for the year ending 31st March 1908.	Ditto . . .	Ditto, 1908. Re. 0-8-0.
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Ditto, for the year ending 31st March 1912.	Ditto . . .	Ditto, 1912. Re. 0-8-0.

Title of work.	Name and official designation of author	Press, date of publication and issue price of each volume or of complete work.
MYSORE AND COORG—		
Mysore Inscriptions . . .	L. Rice, Director of Public Instruction.	Mysore Government Press, 1879. Rs. 6.
Epigraphia Carnatica—		
Vol. I. Coorg Inscriptions . . .	L. Rice, Secretary to Government.	Ditto, 1886. Rs. 2-8-0.
Vol. II. Inscriptions at Sravana Belgola, a chief seat of the Jains (Mysore).	L. Rice, Director of Archæological Researches and Secretary to Government, Mysore.	Ditto, 1889. Rs. 12.
Vol. III. Inscriptions in the Mysore District, Part I.	Ditto . . .	Ditto, 1894. Rs. 12.
„ IV. Ditto, Part II . . .	Ditto . . .	Ditto, 1898. Rs. 10.
„ V. Ditto, Inscriptions in the Hassan District in 2 sections.	L. Rice, Director of Archæological Researches.	Basel Mission Press, Mangalore, 1902. Rs. 20.
„ VI. Ditto, Inscriptions in the Kadur District.	Ditto . . .	Ditto, 1901. Rs. 8.
„ VII. Ditto, Inscriptions in the Shimoga District, Part I.	Ditto . . .	Mysore Government Press, 1902. Rs. 10-8.
„ VIII. Ditto, ditto, Part II in two sections.	Ditto . . .	Ditto, 1904. Rs. 14.
„ IX. Inscriptions in the Bangalore District.	Ditto . . .	Ditto, 1905. Rs. 12-8.
„ X. Inscriptions in the Kolar District in two sections.	Ditto . . .	Basel Mission Press, 1905. Rs. 14.
„ XI. Inscriptions in the Chitaldrug district.	Ditto . . .	Ditto, 1903. Rs. 9.
„ XII. Inscriptions in the Tumkur District.	Ditto . . .	Ditto, 1904. Rs. 9.
Mysore and Coorg from the Inscriptions.	Ditto . . .	Archibald Constable & Co., London, 1909. Rs. 9-6-0.
ASSAM—		
Report on the progress of historical research in Assam.	E. A. Gait, I.C.S., Honorary Director of Ethnography in Assam.	Assam Secretariat Printing Office, Shillong, 1897. Re. 1.
List of archæological remains in the Province of Assam.	.....	Ditto, 1902.
Report on an archæological tour in Assam in January and February 1905.	T. Bloch, PH.D. Archæological Surveyor, Bengal Circle.	Ditto, 1905.

List of Public Libraries, etc., to which copies of the Director-General's Annual Reports are regularly supplied.

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UNITED KINGDOM.

British Museum Library, Great Russell Street,
Bloomsbury, London.
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London University Library, Imperial Institute,
London, S.W.
Cambridge University Library, Cambridge.
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Folklore Society, 11, Old Square, Lincoln's Inn,
London, W.C.
National Art Library, South Kensington
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Royal Institute of British Architects, 9, Conduit
Street, Hanover Square, London, W.
Advocates' Library, Edinburgh.
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London.
Royal Society, Edinburgh.
Royal Irish Academy, 19, Dawson Street,
Dublin

National Library of Ireland, Leinster House,
Kildare Street, Dublin.
Royal Asiatic Society, 22, Albermarle Street,
London.
Society of Antiquaries of London, Burlington
House, Piccadilly, W.
Royal Scottish Museum, Edinburgh, Scotland.
Society of Antiquaries of Scotland, National
Museum of Antiquities, Queen Street, Edin-
burgh.
Imperial Institute, London.
Indian Institute, Oxford.
Society for Protection of Ancient Buildings,
10, Buckingham Street, Adelphi, W.C.
The Royal Academy of Arts, Burlington House,
London.
Society for the Promotion of Hellenic Studies,
London.
Royal Anthropological Institute of Great
Britain and Ireland, 3, Hanover Street, W.,
London.

FRANCE.

Bibliothèque Nationale, Paris.
Institute de France, Paris.

Musée Guimet., 7, Place d'Iena, Paris.

ITALY.

Biblioteca Nazionale, Vittorio Emanuele, Rome.
R. Biblioteca Nazionale, Centrale di Firenze.
The Società Asiatica Italiana, Firenze.

British School at Rome.
American School of Classical Studies at Rome.

OTHER COUNTRIES IN EUROPE.

Koninklijke Akademie van Wetenschappen
te Amsterdam, Holland.
Royal Institute of Netherlands India, The
Hague, Holland.
Imperial Academy of Sciences (for the Asiatic
Museum), Petrograd, Russia.
Royal Library, Copenhagen, Denmark.
National Museum, Copenhagen, Denmark.

Académie Royale d'Archéologie de Belgique,
Anvers.
University Library, Upsala, Sweden.
University Library, Christiania, Norway.
British School at Athens, Greece.
La Société Archéologique d'Athènes, Athens,
Greece.

AMERICA.

American Oriental Society, 235, Bishop Street, New Haven, Conn., U. S. A.	Secretary, National Museum, Washington, U. S. A.
Smithsonian Institution, Washington, D. C., U. S. A.	Field Museum of Natural History, Chicago.

BRITISH COLONIES

The Museum, Canterbury, New Zealand.	Royal Asiatic Society, Ceylon Branch, Colombo.
Literary and Historical Society, Quebec, Canada	Straits Branch, Royal Asiatic Society, Singapore.
Melbourne Library, Melbourne.	North China Branch of the Royal Asiatic Society, Shanghai
University Library, Sydney, New South Wales	Museum of Arabic Art, Cairo, Egypt.
Victoria Public Library. Perth, Western Australia.	

FOREIGN COLONIES

Directeur de l'Ecole française d'extrême Orient, Hanoi.	Institut Français d'Archéologie Orientale du Caire, Cairo, Egypt.
Bataviaasch Genootschap van Kunsten en Wetenschappen, Batavia.	Ethnological Survey for the Phillipine Islands, Department of Interior, Manila

II —INDIA

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Imperial Library, Calcutta.	Press Room, Calcutta and Simla
Indian Museum, Calcutta	

(2) PROVINCIAL.

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University Library, Madras.	Government Central Museum, Madras.
Public Library, Madras.	Christian College Library, Madras.
Presidency College, Madras	

BOMBAY.

Secretariat Library, Bombay.	School of Art, Bombay.
University Library, Bombay.	The College of Science, Poona.
Bombay Branch of the Royal Asiatic Society, Town Hall, Bombay	

BENGAL.

Secretariat Library, Writers' Buildings, Calcutta.	Sanskrit College Library, 1, College Square, Calcutta.
University Library, The Senate House, Calcutta.	Asiatic Society of Bengal, 57, Park Street, Calcutta
Presidency College Library, 1, College Square, Calcutta.	

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Secretariat Library, Public Works Department, Allahabad.	Provincial Museum Library, Lucknow.
University Library, Allahabad.	Sanskrit College, Benares.
Public Library, Allahabad.	Thomason College, Roorkee.
	Muttra Museum of Archæology, Muttra.

PUNJAB.

Secretariat Library, Public Works Department, Lahore.	Museum Library, Lahore.
Punjab Public Library, Lahore.	University Library, Lahore.
	Government College Library, Lahore.

DELHI.

Museum, Delhi.	Public Library, Delhi.
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NORTH-WEST FRONTIER PROVINCE.

Secretariat Library, Peshawar.	Museum Library, Peshawar.
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BURMA.

Secretariat Library, Rangoon.	The Phayre Museum, Rangoon.
The Bernard Free Library, Rangoon.	

CENTRAL PROVINCES.

Secretariat Library, Nagpur.	Museum Library, Nagpur.
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ASSAM.

Secretariat Library, Shillong.

COORG.

The Chief Commissioner of Coorg's Library, Bangalore.

NATIVE STATES.

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The Resident's Library, Hyderabad.

Central India.

Library of the Agent to the Governor-General, Indore.	Dhar Museum Library, Dhar.
	Rajkumar College, Indore.

Rajputana.

Library of the Chief Commissioner and Agent to the Governor-General, Ajmer.	College Library, Ajmer.
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Library of the Resident at Baroda.

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